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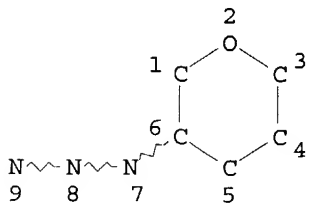


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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   9

STEREO ATTRIBUTES: NONE
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L14           12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L3
L18           34 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND ANOMER?
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L20           32 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 OR L14 OR L19


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L20  ANSWER 1 OF 32  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:589446  HCAPLUS
TITLE:                    Enhanced scintigraphic imaging agents for imaging of
                          infection and inflammation
INVENTOR(S):              Krause, Sabine; Manchanda, Rajesh
PATENT ASSIGNEE(S):       Schering A.-G., Germany
SOURCE:                   PCT Int. Appl., 48 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     --------------       ----   --------    --------------------    --------
     WO 2004060409         A1    20040722    WO 2004-EP2004000051    20040107
         W:  AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BB,
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             CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG,
             ES, ES, FI, FI, GB, GD, GE, GE, GH, GH, GH, GM, HR, HR, HU, HU,
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EP 1437145 A1 20040714 EP 2003-204 20030107

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: EP 2003-204 A 20030107

US 2003-438316P P 20030107

AB The invention describes enhanced scintigraphic imaging agents that can be used to localize infection and inflammation in a mammal. Specifically, the invention relates to radiolabeled, preferably technetium-99m labeled scintigraphic imaging agents that are compns. of a polysulfated glycan or mixture thereof and a compound comprising a polybasic peptide covalently linked to a radiolabel binding moiety. Methods and kits for making such compns., and methods for using such compns. to image sites of infection and inflammation in a mammalian body are also provided. The enhanced imaging agents exhibit improved binding affinity to the polysulfated glycans, better biodistribution and infection uptake, thus providing improved imaging results.

IC ICM A61K051-08

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 8, 34

IT **Solid phase synthesis**
(peptide; scintigraphic imaging agents for imaging of infection and inflammation)

IT 56-87-1D, Lysine, radiolabeled conjugates 499-86-5D, radiolabeled conjugates 5538-93-2D, radiolabeled conjugates 13030-16-5D, radiolabeled conjugates 13981-56-1D, fluorine 18, compds. 14119-09-6D, gallium 67, compds. 14133-76-7D, technetium 99, peptide conjugated complexes 14158-31-7D, iodine 125, compds. 14269-78-4D, ytterbium 169, compds. 14998-63-1D, rhenium 186, compds. 15715-08-9D, iodine 123, compds. 15750-15-9D, indium 111, compds. 15757-14-9D, gallium 68, compds. 25096-86-0D, radiolabeled conjugates 32018-31-8D, radiolabeled conjugates **37270-94-3**, blood platelet factor 4 51532-41-3D, radiolabeled conjugates 124764-08-5D, radiolabeled conjugates 153300-19-7D, radiolabeled conjugates 158615-58-8D, P 483, radiolabeled conjugate 160983-00-6D, radiolabeled conjugates 718616-59-2D, radiolabeled conjugate 718616-61-6D, radiolabeled conjugate 718616-62-7D, radiolabeled conjugate 718616-63-8D, radiolabeled conjugate 726181-48-2D, radiolabeled conjugate
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)

IT **37270-94-3**, blood platelet factor 4
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)

RN 37270-94-3 HCAPLUS

CN Blood platelet factor 4 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L20 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:568176 HCAPLUS

DOCUMENT NUMBER: 141:111544

TITLE: Enhanced scintigraphic imaging agents for imaging of infection and inflammation

INVENTOR(S): Manchanda, Rajesh; Krause, Sabine

PATENT ASSIGNEE(S): Schering AG, Germany

SOURCE: Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1437145	A1	20040714	EP 2003-204	20030107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
WO 2004060409	A1	20040722	WO 2004-EP2004000051	20040107
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GH, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ				

PRIORITY APPLN. INFO.:
EP 2003-204 A 20030107
US 2003-438316P P 20030107

AB The invention describes enhanced scintigraphic imaging agents that can be used to localize infection and inflammation in a mammal. Specifically, the invention relates to radiolabeled, preferably technetium-99m labeled scintigraphic imaging agents that are compns. of a polysulfated glycan or mixture thereof and a compound comprising a polybasic peptide covalently linked to a radiolabel binding moiety. Methods and kits for making such compns., and methods for using such compns. to image sites of infection and inflammation in a mammalian body are also provided. The enhanced imaging agents exhibit improved binding affinity to the polysulfated glycans, better biodistribution and infection uptake, thus providing improved imaging results.

IC ICM A61K051-08
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 8, 34

IT **Solid phase synthesis**
(peptide; scintigraphic imaging agents for imaging of infection and inflammation)

IT **9041-08-1**, Heparin sodium 24967-94-0, Dermatan sulfate 75634-40-1D, Dermatan, sulfated derivs.
RL: DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)

IT **37270-94-3DP**, Platelet factor 4, radiolabeled analogs 153476-71-2DP, radiolabeled conjugates 158615-58-8DP, P 483, 99mTc-labeled 718616-59-2DP, 99mTc-labeled conjugates 718616-60-5DP, 99mTc-labeled 718616-61-6DP, 99mTc-labeled 718616-62-7DP, 99mTc-labeled 718616-63-8DP, 99mTc-labeled
RL: DGN (Diagnostic use); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)

IT **9041-08-1**, Heparin sodium
RL: DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)

RN 9041-08-1 HCAPLUS
CN Heparin, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **37270-94-3DP**, Platelet factor 4, radiolabeled analogs
RL: DGN (Diagnostic use); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(scintigraphic imaging agents for imaging of infection and inflammation)
RN 37270-94-3 HCAPLUS
CN Blood platelet factor 4 (9CI) (CA INDEX NAME)

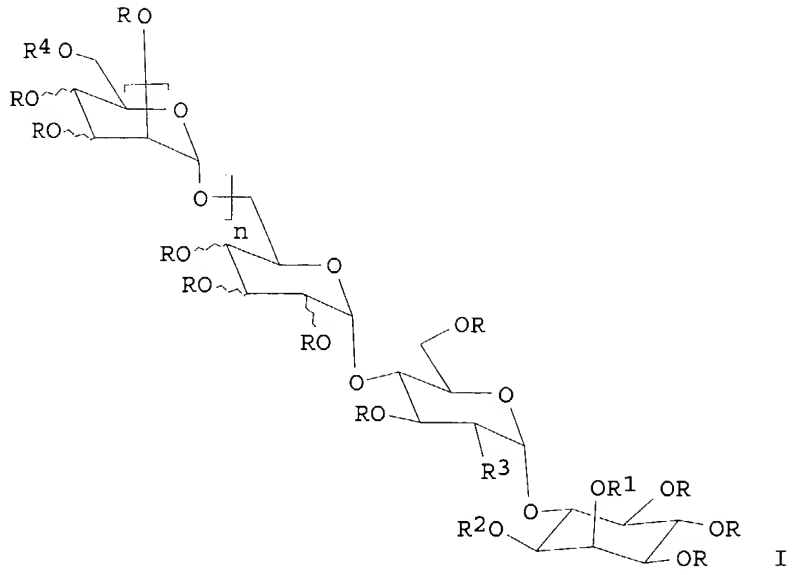
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:41660 HCAPLUS
DOCUMENT NUMBER: 140:77360
TITLE: Solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans
INVENTOR(S): Seeberger, Peter H.; Hewitt, Michael C.; Snyder, Daniel
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005532	A2	20040115	WO 2003-US21564	20030710
WO 2004005532	A3	20040325		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-394794P P 20020710
OTHER SOURCE(S): MARPAT 140:77360
GI



I

AB One aspect of the present invention relates to solution-phase synthesis approaches to glycosylphosphatidylinositol (GPI) I, wherein, n is 1-4; R represents independently for each occurrence H, alkyl, aryl, CH2-aryl, C(O)-alkyl, C(O)-aryl, or Si(alkyl)3; R1 and R2 are independently H, CH2-aryl, C(O)-alkyl, C(O)-aryl, Si(alkyl)3; or R1 and R2 taken together are C(CH3)2, P(O)OH, or P(O)OR5; R3 is amino, N3, or NH3X; R4 represents independently for each occurrence H, alkyl, aryl, CH2-aryl, C(O)- alkyl, C(O)-aryl, Si(alkyl)3, or P(O)(OR5)2; R5 represents independently for each occurrence H, Li+, Na+, K+, Rb+, Cs+, aryl, or an optionally substituted alkyl group; and X is a halogen, alkyl carboxylate, or aryl carboxylate. Another aspect of the present invention relates to key building blocks, and syntheses thereof, useful for GPI assembly. Yet another aspect of the invention relates to an automated method for the synthesis of GPIs and fragments thereof. The synthesis of a pseudo-hexasaccharide glycosylphosphatidylinositol has been reduced to practice, both in solution and using a combination of solution and automated solid-phase methodologies. The material made in solution was covalently attached to a protein carrier and used to vaccinate mice. Inoculated mice were substantially protected against a subsequent challenge with Plasminodium parasites. This discovery further implicates GPI as the dominant toxin in malaria infections, and lays the groundwork for future trials in human volunteers. Combinations of solution and automated solid-phase synthetic methodologies will see continued usage in this context, and are expected to lead to the rapid generation of more potent vaccines for malaria and other maladies.

IC ICM C12Q

CC 33-6 (Carbohydrates)
Section cross-reference(s): 1, 63

IT Antimalarials
Fissurella
Human
Malaria
Parasite
Parasiticides
Solid phase synthesis
Vaccines
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol

glycans a vaccines against Plasminodium parasites and malaria infection)

IT Cyclitols
Oligosaccharides, preparation
Phosphatidylinositols
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

IT **150772-66-0P 208524-76-9P 208524-83-8P**
460095-54-9P 478065-49-5P **640277-64-1P** 640277-73-2DP,
Key-Hole Limpet Haemocyanin bound **640277-74-3P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

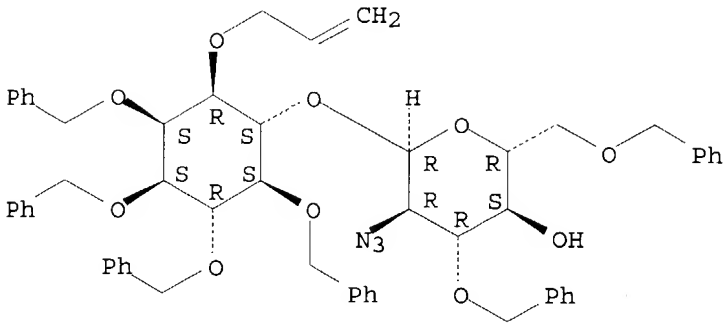
IT 97-30-3 1125-88-8, Benzaldehyde dimethyl acetal 14218-30-5
61330-62-9 83441-60-5 129163-12-8 130539-43-4 133339-58-9
225924-46-9 **640277-65-2** 640277-75-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

IT 53008-65-4P 115533-35-2P 129519-27-3P 129519-28-4P 131233-63-1P
131233-69-7P 132437-54-8P 137793-99-8P 202845-42-9P 208712-66-7P
214334-28-8P 346441-51-8P **439684-07-8P** 460095-57-2P
460095-58-3P 478065-19-9P 478065-21-3P
478065-23-5P 478065-35-9P **478065-38-2P** 640277-55-0P
640277-57-2P 640277-58-3P 640277-59-4P
640277-60-7P 640277-61-8P 640277-62-9P
640277-63-0P 640277-66-3P 640277-67-4P
640277-68-5P 640277-69-6P 640277-70-9P
640277-72-1P 640277-76-5P 640277-77-6P 640277-78-7P
640277-80-1P 640277-81-2P 640277-82-3P 640277-83-4P 640277-84-5P
640277-85-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

IT **150772-66-0P 208524-76-9P 208524-83-8P**
640277-64-1P 640277-74-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

RN 150772-66-0 HCAPLUS
CN D-myo-Inositol, 6-O-[2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-2,3,4,5-tetrakis-O-(phenylmethyl)-1-O-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



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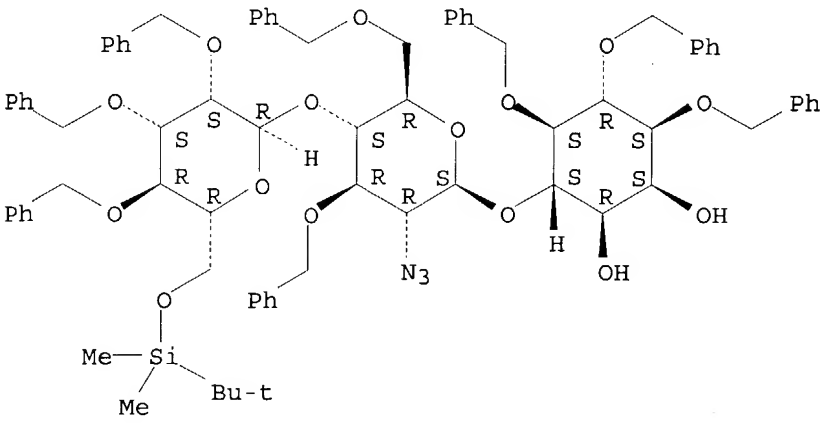
CN D-myo-Inositol, O-6-O-[(1,1-dimethylethyl)dimethylsilyl]-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 208524-83-8 HCAPLUS
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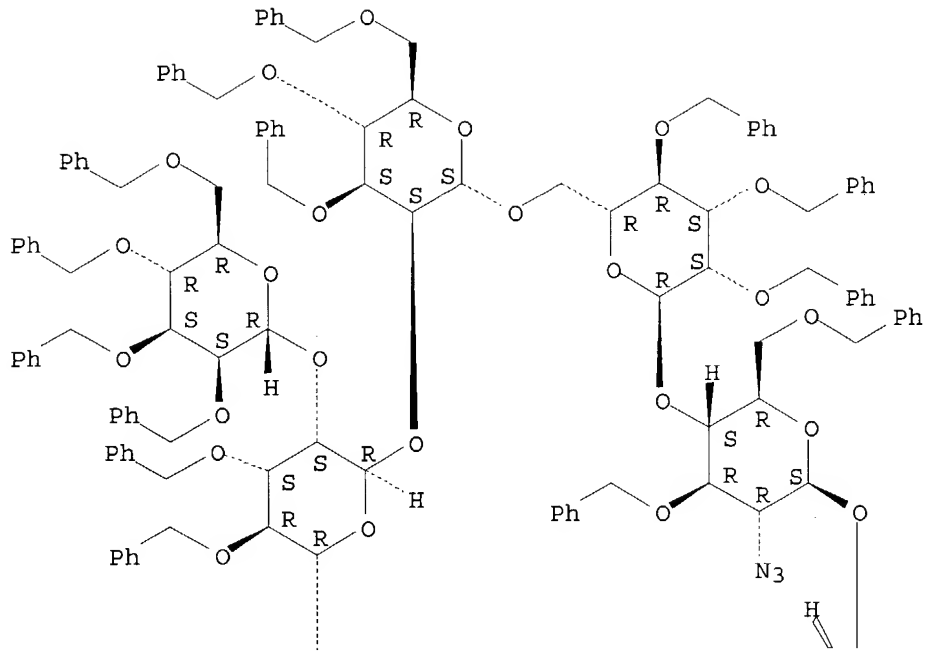
Absolute stereochemistry.

PAGE 1-A



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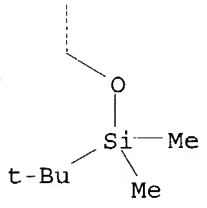

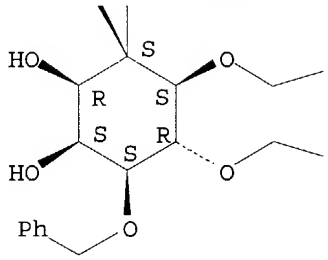

PAGE 2-B

RN 640277-64-1 HCAPLUS

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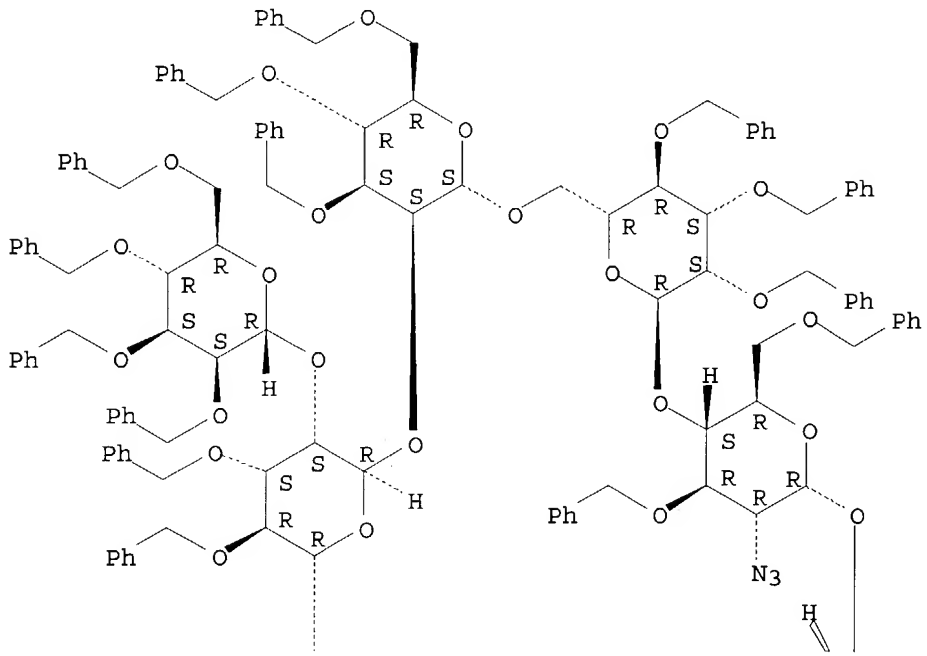
bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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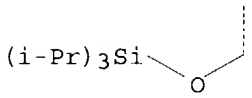
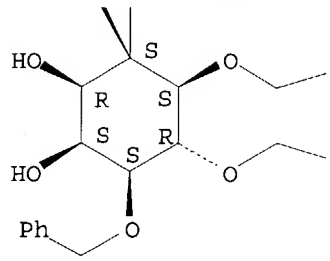


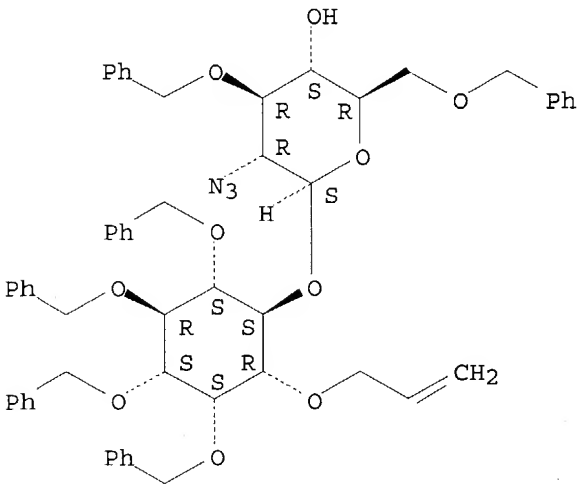


PAGE 2-B

RN 640277-74-3 HCAPLUS

CN D-myo-Inositol, 6-O-[2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl]-2,3,4,5-tetrakis-O-(phenylmethyl)-1-O-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



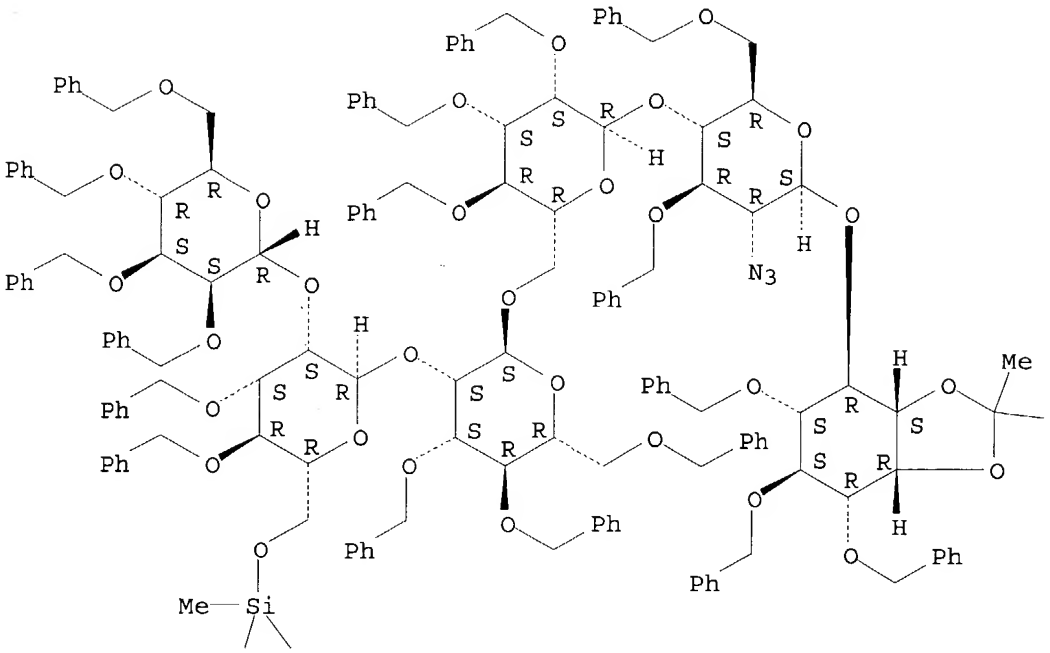
IT **640277-65-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

RN 640277-65-2 HCAPLUS

CN D-myo-Inositol, O-2,3,4,6-tetrakis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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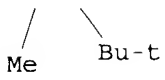
PAGE 2-A

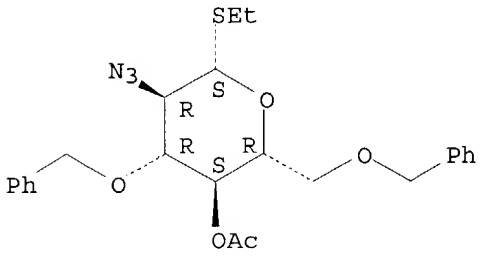


IT **439684-07-8P 460095-58-3P 478065-19-9P**
478065-21-3P 478065-38-2P 640277-57-2P
640277-58-3P 640277-59-4P 640277-60-7P

640277-61-8P 640277-62-9P 640277-63-0P
640277-66-3P 640277-67-4P 640277-68-5P
640277-69-6P 640277-70-9P 640277-72-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase and solution-phase synthesis of glycosylphosphatidylinositol glycans a vaccines against Plasminodium parasites and malaria infection)

RN 439684-07-8 HCAPLUS
CN β-D-Glucopyranoside, ethyl 2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-1-thio-, 4-acetate (9CI) (CA INDEX NAME)

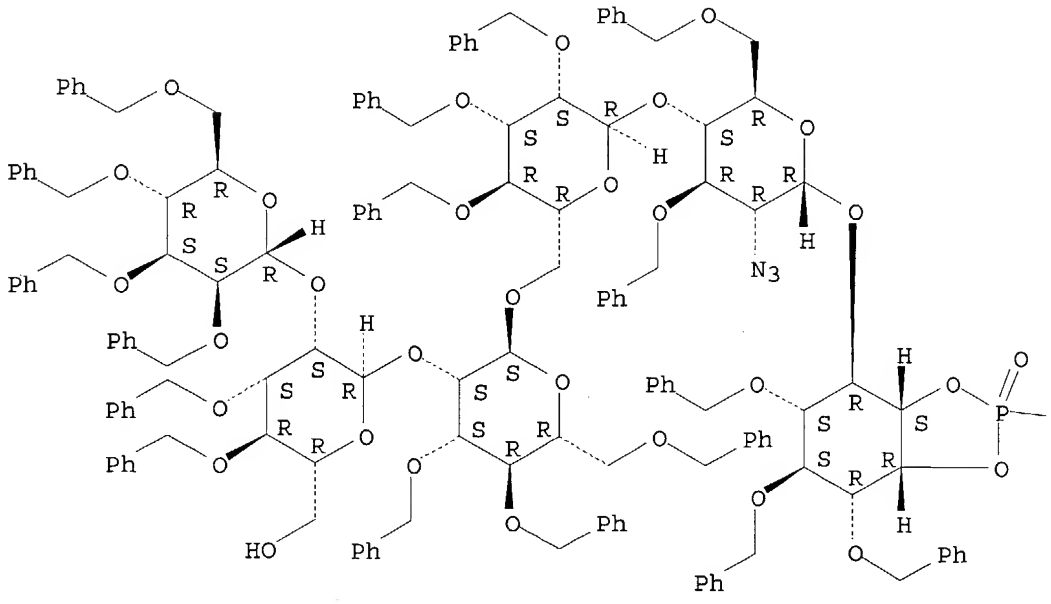
Absolute stereochemistry. Rotation (-).



RN 460095-58-3 HCAPLUS
CN D-myo-Inositol, O-2,3,4,6-tetrakis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4-bis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-3,4,5-tris-O-(phenylmethyl)-, cyclic 1,2-(hydrogen phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



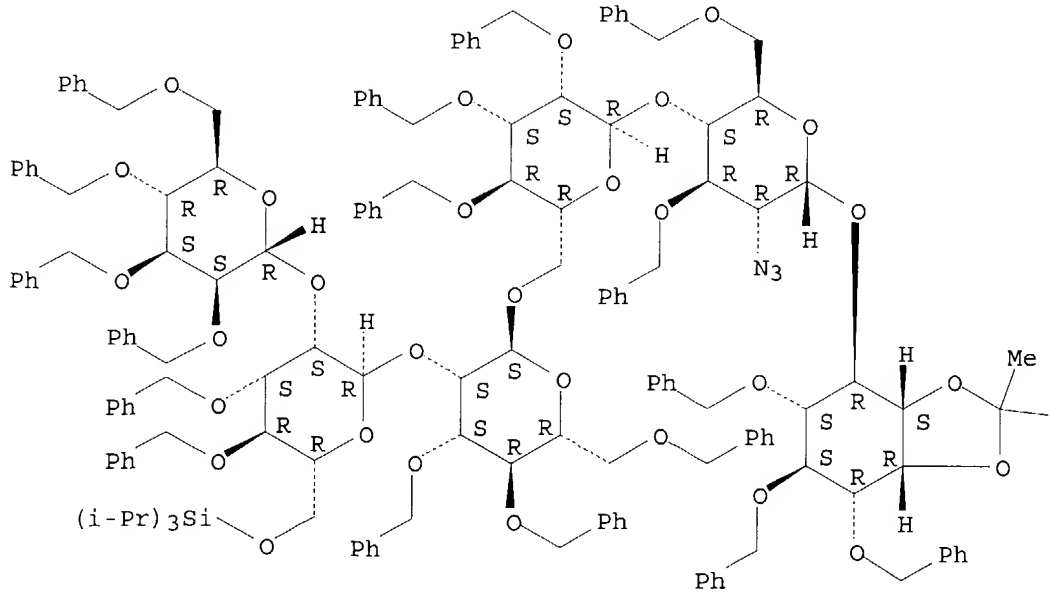
PAGE 1-B

—OH

RN 478065-19-9 HCAPLUS
CN D-myo-Inositol, O-2,3,4,6-tetrakis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

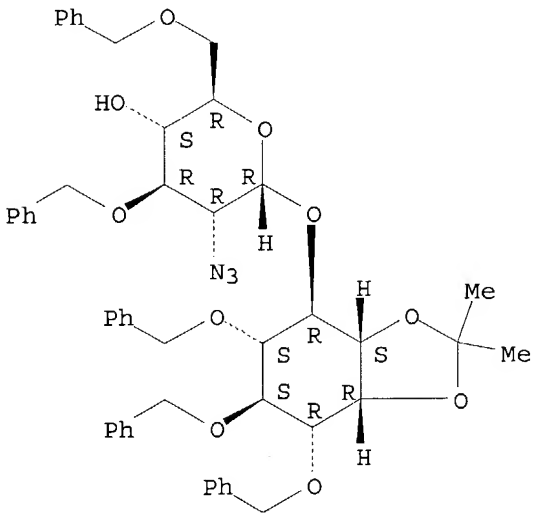
PAGE 1-A



—Me

RN 478065-21-3 HCAPLUS
CN D-myo-Inositol, 6-O-[2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

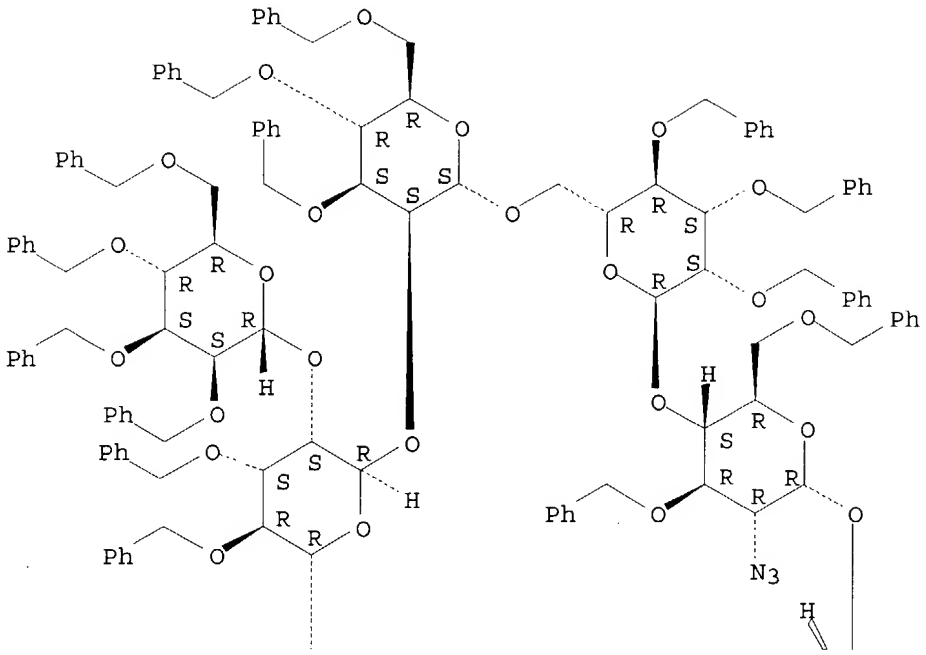
Absolute stereochemistry. Rotation (+).



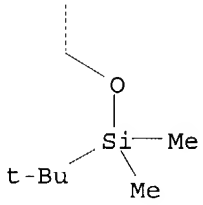
RN 478065-38-2 HCAPLUS
CN D-myo-Inositol, O-2,3,4,6-tetrakis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-6-O-[(1,1-dimethylethyl)dimethylsilyl]-3,4-bis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

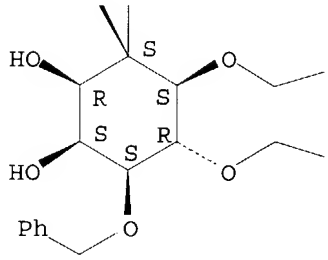
Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 2-A

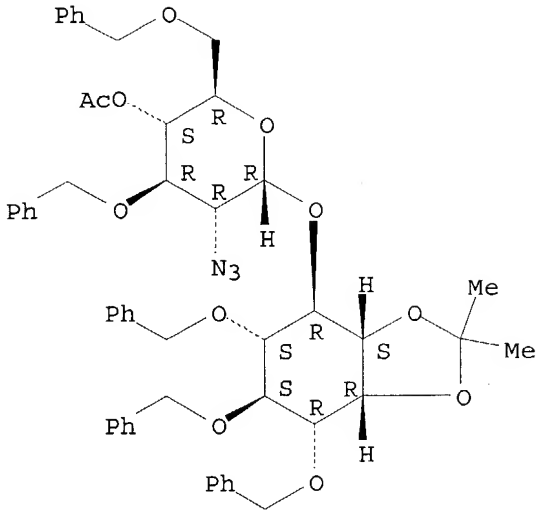




PAGE 2-B

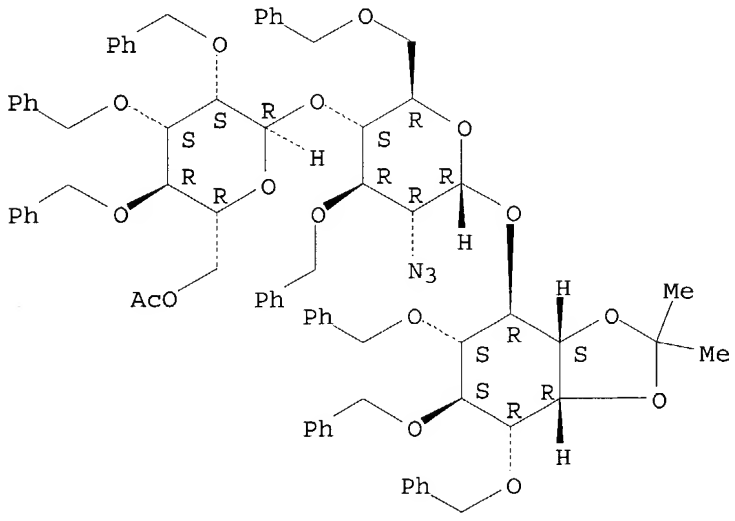
RN 640277-57-2 HCAPLUS
CN D-myo-Inositol, 6-O-[4-O-acetyl-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



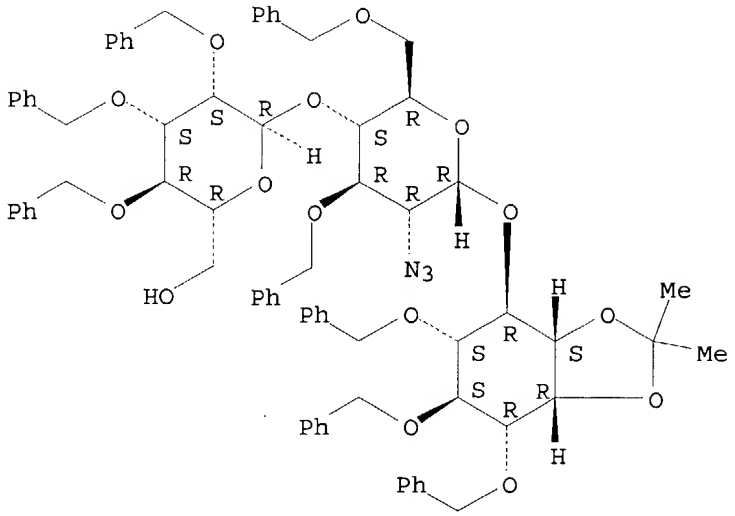
RN 640277-58-3 HCAPLUS
CN D-myo-Inositol, O-6-O-acetyl-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



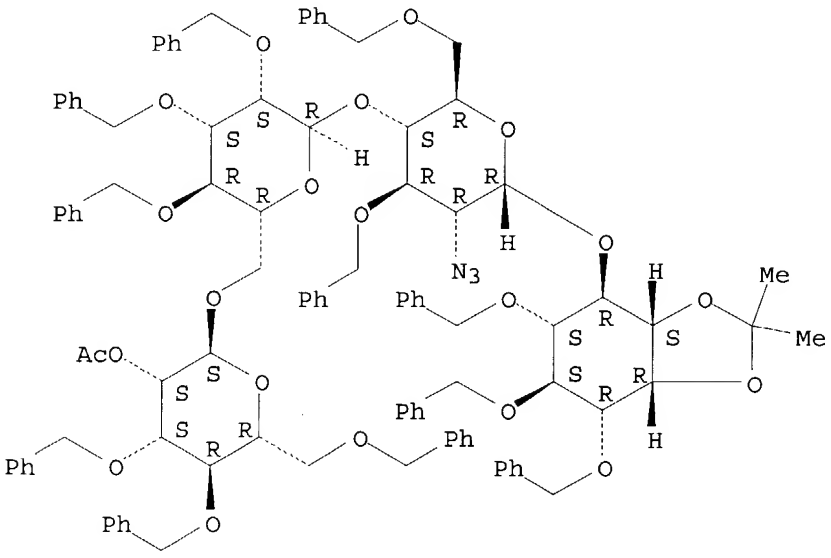
RN 640277-59-4 HCAPLUS
CN D-myo-Inositol, O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



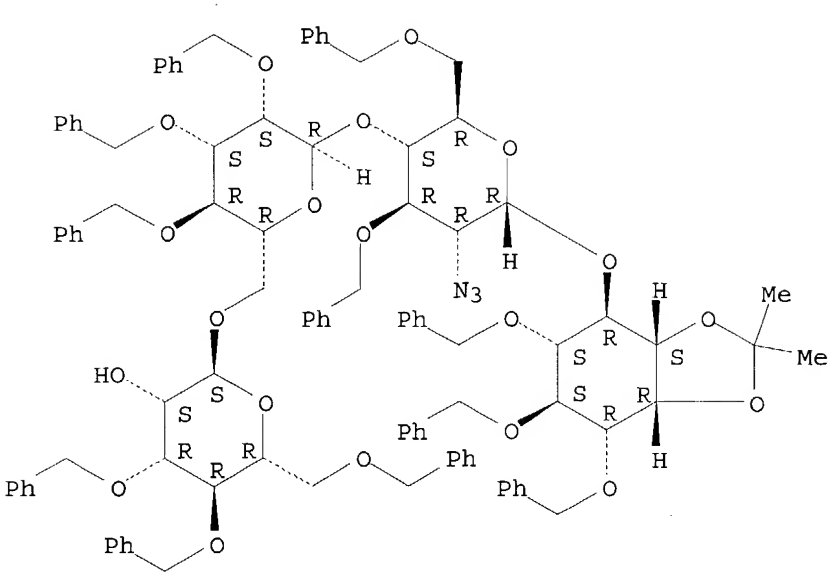
RN 640277-60-7 HCAPLUS
CN D-myo-Inositol, O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 640277-61-8 HCAPLUS
CN D-myo-Inositol, O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

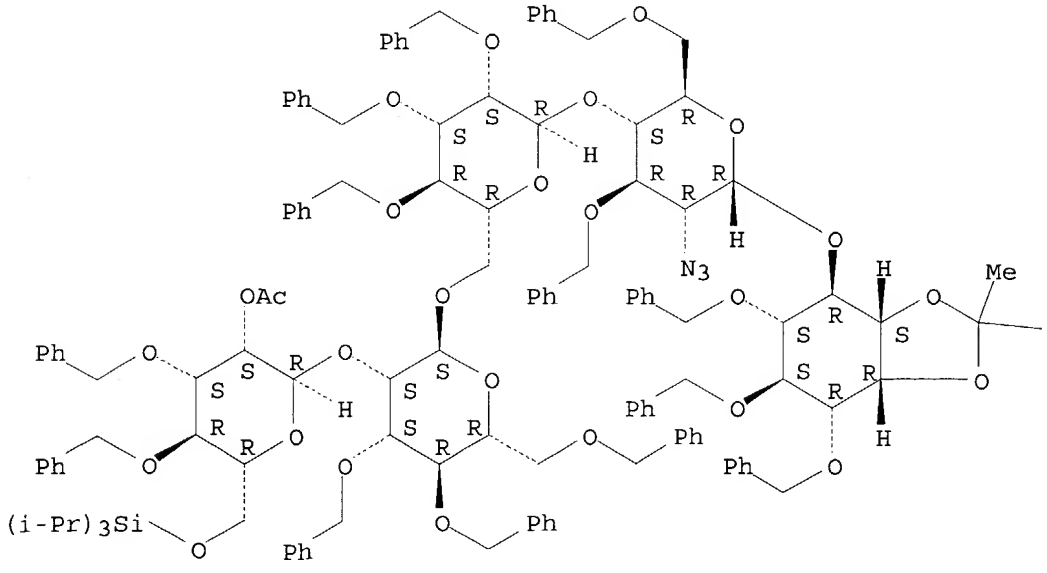
Absolute stereochemistry. Rotation (+).



RN 640277-62-9 HCAPLUS
CN D-myo-Inositol, O-2-O-acetyl-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



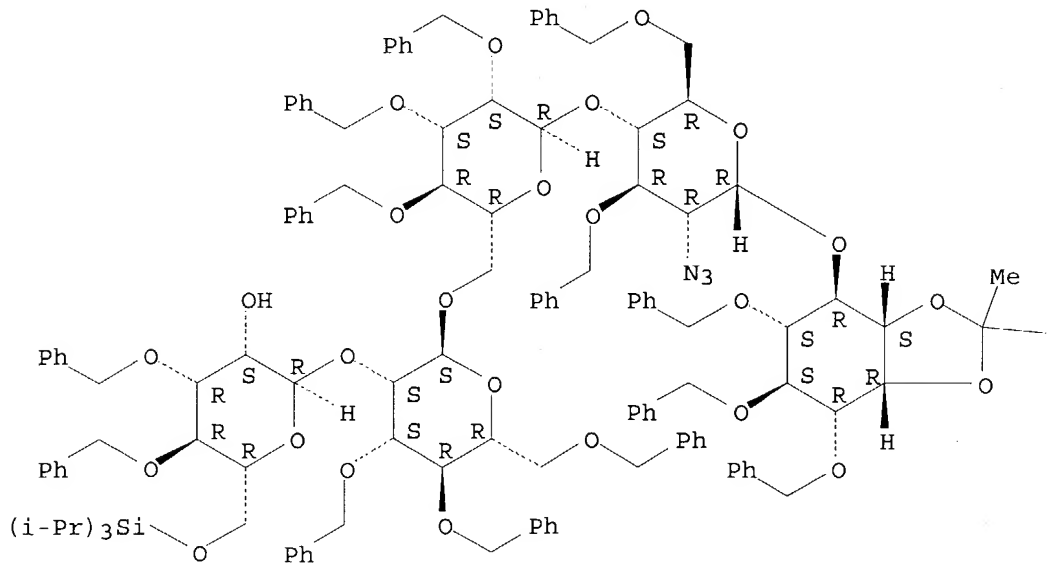
PAGE 1-B

—Me

RN 640277-63-0 HCAPLUS
CN D-myo-Inositol, O-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

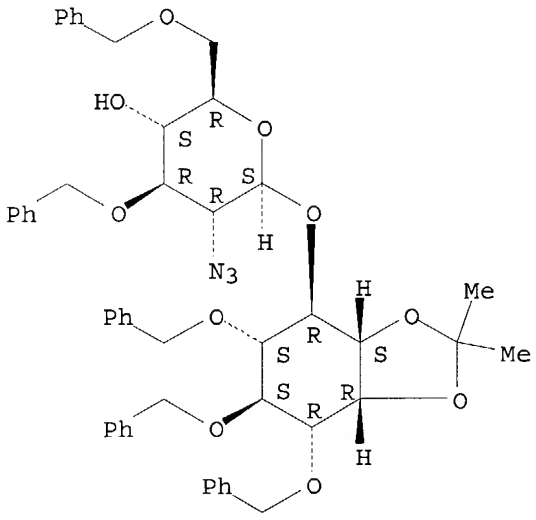
PAGE 1-A



—Me

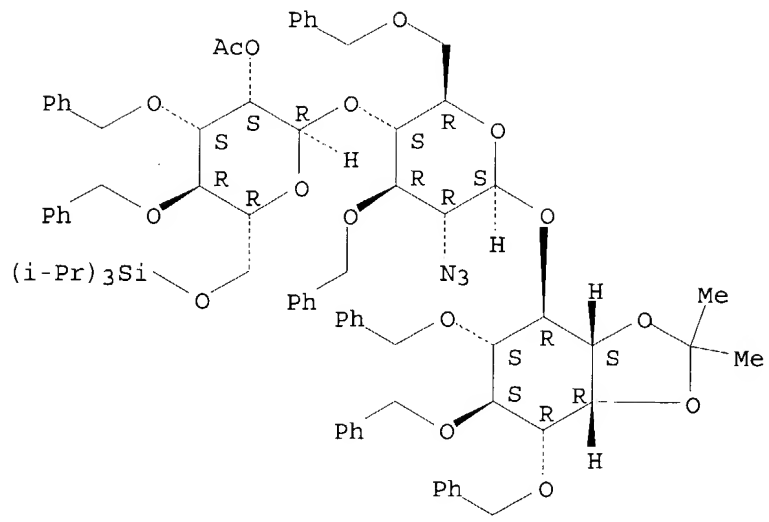
RN 640277-66-3 HCAPLUS
CN D-myo-Inositol, 6-O-[2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



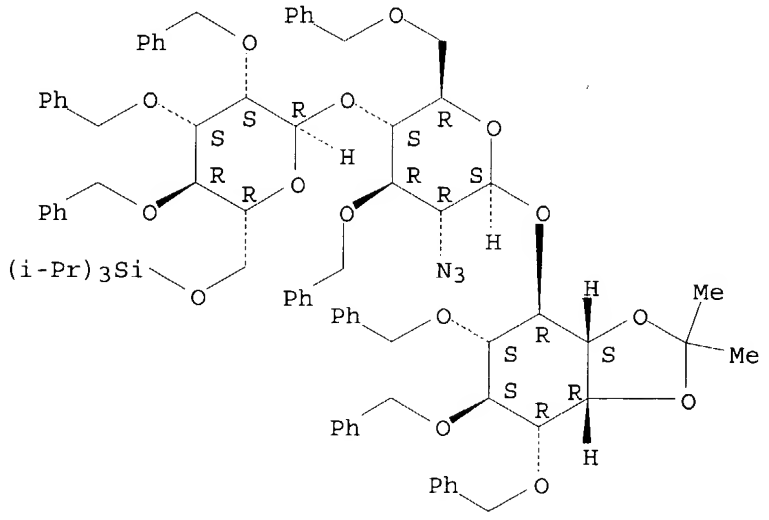
RN 640277-67-4 HCAPLUS
CN D-myo-Inositol, O-2-O-acetyl-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 640277-68-5 HCAPLUS
CN D-myo-Inositol, O-2,3,4-tris-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

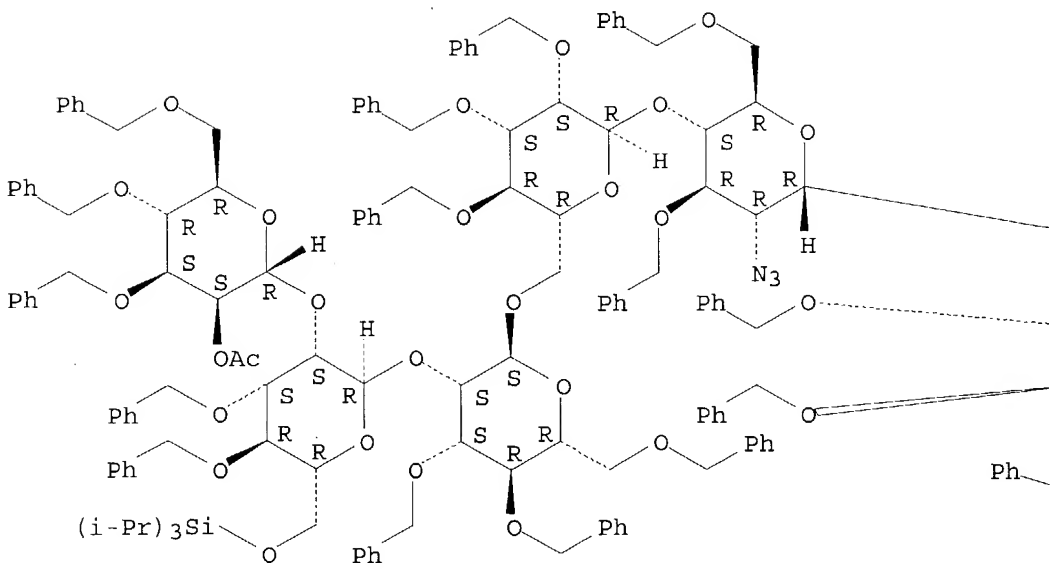
Absolute stereochemistry. Rotation (-).



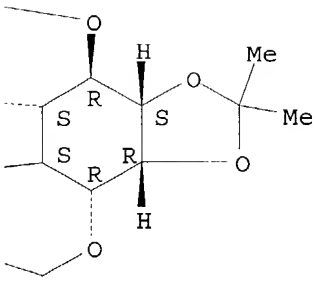
RN 640277-69-6 HCAPLUS
CN D-myo-Inositol, O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



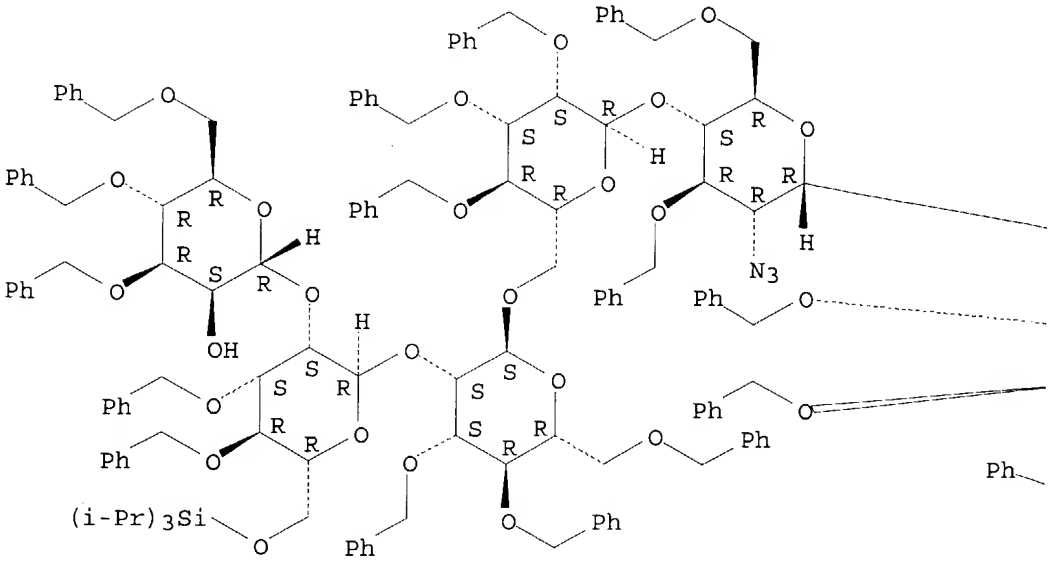
PAGE 1-B



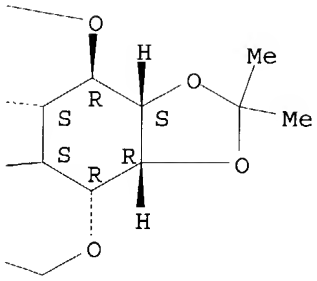
RN 640277-70-9 HCAPLUS
CN D-myo-Inositol, O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-1,2-O-(1-methylethylidene)-3,4,5-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



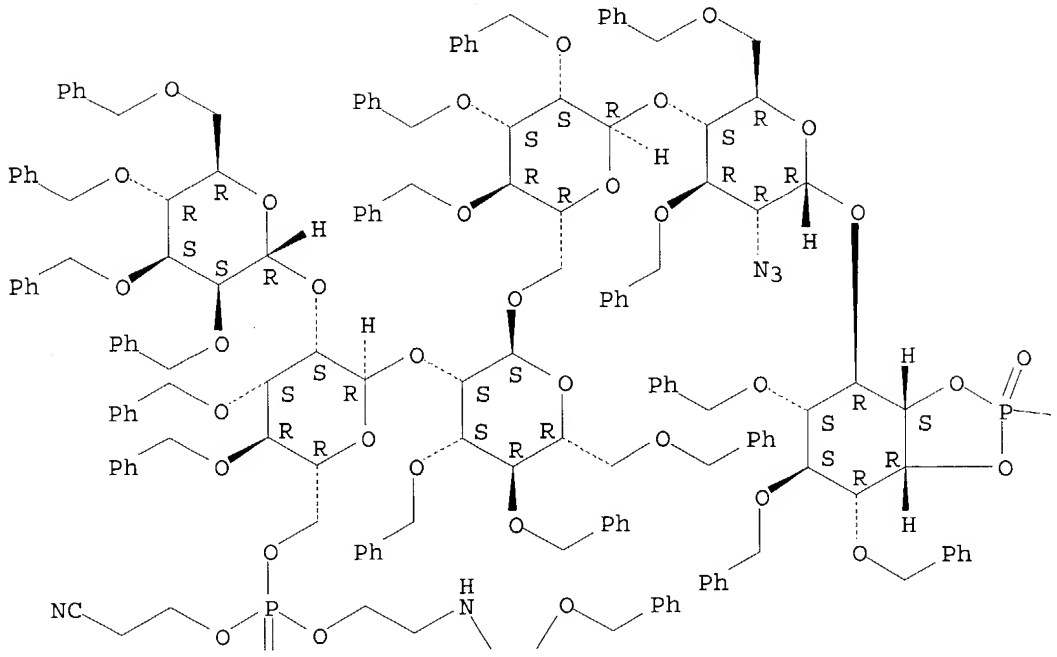
PAGE 1-B



RN 640277-72-1 HCAPLUS
CN D-myo-Inositol, O-2,3,4,6-tetrakis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-6-O-[1-(2-cyanoethoxy)-1-oxido-6-oxo-8-phenyl-2,7-dioxa-5-aza-1-phosphaoct-1-yl]-3,4-bis-O-(phenylmethyl)-α-D-mannopyranosyl-(1→2)-O-3,4,6-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→6)-O-2,3,4-tris-O-(phenylmethyl)-α-D-mannopyranosyl-(1→4)-O-2-azido-2-deoxy-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→6)-3,4,5-tris-O-(phenylmethyl)-, cyclic 1,2-(hydrogen phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—OH

PAGE 2-A

L20 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:892790 HCAPLUS
DOCUMENT NUMBER: 139:365168
TITLE: Combinatorial library solid phase synthesis of disaccharides for drug discovery
INVENTOR(S): Meutermans, Wim; West, Michael Leo; Adamson, George; Thanh Le, Giang; Drinnan, Nicholas Barry; Abbenante, Giovani; Becker, Bernd; Grathwohl, Matthias; Rajaratnam, Premraj; Tometzki, Gerald
PATENT ASSIGNEE(S): Alchemia Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 156 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003093286	A1	20031113	WO 2003-AU494	20030424

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2002-2138 A 20020503
OTHER SOURCE(S): MARPAT 139:365168
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Methods are described for the preparation of combinatorial libraries of potentially biol. active disaccharide compds. of formula A-d-L-e-B wherein A and B are independently I and II wherein T is O, CH2; R6 and R7 are H, together form a carbonyl oxygen; R1 is H, N(Z)Y, C(Z)Y, OZ, SZ; Y is H, double bond O, triple bond N, acyl sulfonyl, phosphoyl amide, Z is H, alkyl, alkenyl, alkynyl, heteroalkyl, acyl, arylacyl, heteroarylacyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl; d d and e represent the connection points for A and B and replace one of the groups R1-R5 in each of the groups A and B and form the connection point for the linker L; L is absent, or is selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, heteroalkyl, cycloheteroalkyl, aryl, heteroaryl, arylalkyl or heteroarylalkyl of 1 to 12 atoms. These compds. are variously functionalized, with a view to varying lipid solubility size, function and other properties, with the particular aim of discovering novel drug or drug-like compds., or compds. with useful properties. The invention provides intermediates, processes and synthetic strategies for the solution or solid phase synthesis of disaccharides, e.g. III, variously functionalized about the sugar ring, including the addition of aromaticity and charge, and the placement of pharmaceutically useful groups and isosteres.

IC ICM C07H003-04
ICS C07H003-02; C07D307-18; C07D309-10; C07D309-14
CC 33-4 (Carbohydrates)
Section cross-reference(s): 1, 63
IT Combinatorial library
Solid phase synthesis
(combinatorial library solid phase synthesis of disaccharides for drug discovery)
IT **Disaccharides**
RL: CPN (Combinatorial preparation); IMF (Industrial manufacture); CMBI (Combinatorial study); PREP (Preparation)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)
IT **620623-06-5P** 620623-17-8P 620623-20-3P 620623-21-4P
620623-25-8P 620623-27-0P 620623-29-2P 620623-31-6P 620623-34-9P
620623-36-1P 620623-39-4P 620623-41-8P 620623-47-4P 620623-48-5P
620623-49-6P 620623-50-9P 620623-51-0P 620625-08-3P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)
IT 79-31-2, Isobutyric acid 96-32-2, Methyl bromoacetate 617-65-2, Glutamic acid 2016-57-1, Decylamine 5231-87-8 14246-53-8
14576-66-0 24621-73-6 43095-05-2 61652-81-1, 1-Decanesulfonyl chloride 79528-48-6 140846-93-1 185114-52-7 **282526-04-9**
282526-05-0 282526-16-3 **609361-21-9** 620622-98-2
620623-01-0 620623-04-3 620623-11-2 620624-64-8 620624-80-8
620625-04-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)
IT **609361-22-0P 609361-50-4P 620622-97-1P**
620622-99-3P 620623-00-9P **620623-02-1P** 620623-03-2P
620623-05-4P **620623-07-6P** 620623-08-7P 620623-09-8P
620623-10-1P **620623-12-3P 620623-13-4P**
620623-14-5P 620623-15-6P 620623-16-7P 620623-18-9P
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620623-37-2P 620623-38-3P 620623-40-7P 620623-42-9P 620623-43-0P
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620623-53-2P 620623-54-3P 620623-55-4P
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620623-59-8P 620623-60-1P 620623-61-2P 620623-62-3P
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620623-73-6P 620623-74-7P 620623-75-8P 620623-76-9P 620623-77-0P
620623-78-1P 620623-79-2P 620623-80-5P **620623-81-6P**
620623-82-7P 620623-83-8P 620623-84-9P 620623-85-0P 620623-86-1P
620623-87-2P 620623-88-3P 620623-89-4P 620623-90-7P 620623-91-8P
620623-92-9P 620623-93-0P 620623-94-1P 620623-95-2P 620623-96-3P
620623-97-4P 620623-98-5P 620623-99-6P 620624-00-2P 620624-01-3P
620624-02-4P 620624-03-5P 620624-04-6P 620624-05-7P 620624-06-8P
620624-07-9P 620624-08-0P 620624-09-1P 620624-10-4P 620624-11-5P
620624-12-6P 620624-13-7P 620624-18-2P 620624-19-3P 620624-25-1P
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620624-65-9P 620624-66-0P 620624-67-1P 620624-68-2P
620624-69-3P 620624-71-7P 620624-73-9P 620624-75-1P 620624-76-2P
620624-78-4P 620624-82-0P 620624-83-1P 620624-84-2P

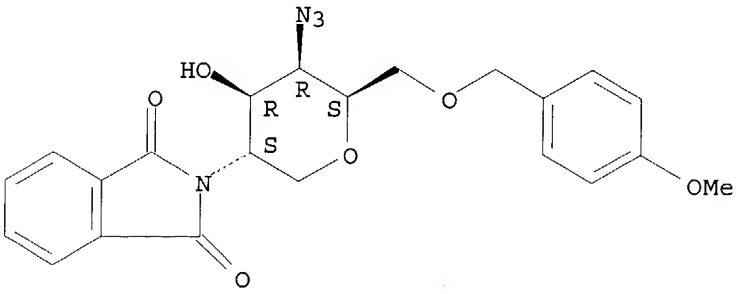
620624-85-3P **620624-86-4P 620624-87-5P**
620624-88-6P 620624-89-7P 620624-91-1P
620624-99-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

IT 620624-14-8P 620624-15-9P 620624-16-0P 620624-20-6P 620624-22-8P
620624-23-9P 620624-27-3P 620624-28-4P 620624-30-8P 620624-32-0P
620624-34-2P 620624-36-4P 620624-38-6P 620624-40-0P 620624-42-2P
620624-45-5P 620624-46-6P 620624-47-7P 620624-48-8P 620624-49-9P
620624-50-2P 620624-51-3P 620624-52-4P 620624-54-6P 620624-58-0P
620624-59-1P 620624-60-4P 620624-70-6P 620624-72-8P 620624-74-0P
620624-77-3P **620624-79-5P** 620624-81-9P **620624-93-3P**
620624-95-5P 620624-97-7P **620625-00-5P 620625-02-7P**
620625-06-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

IT **620623-06-5P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

RN 620623-06-5 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

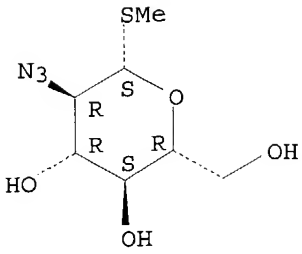
Absolute stereochemistry.



IT **282526-04-9 282526-05-0 609361-21-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

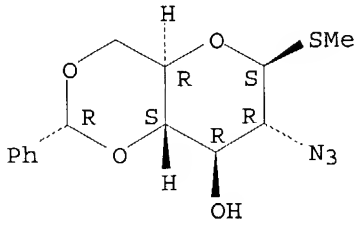
RN 282526-04-9 HCAPLUS
CN β-D-Glucopyranoside, methyl 2-azido-2-deoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282526-05-0 HCAPLUS
CN β-D-Glucopyranoside, methyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 609361-21-9 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H)-pyrimidinylidene)methyl]amino]-, 3-(4-chlorobenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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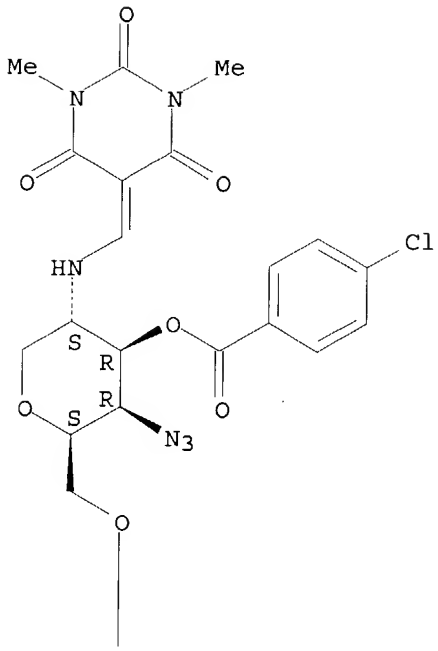

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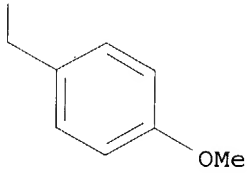
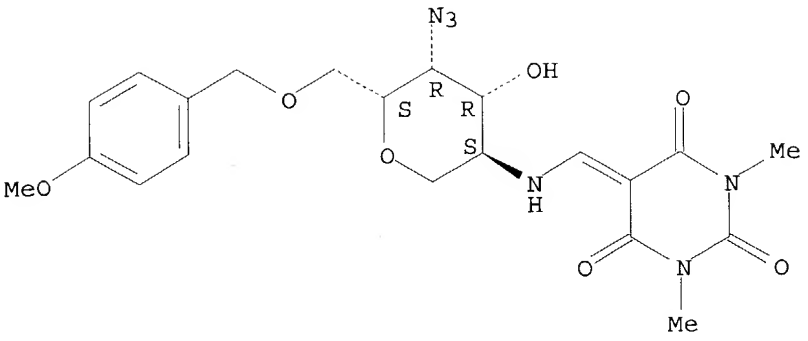


IT **609361-22-0P 609361-50-4P 620622-97-1P**
620623-02-1P 620623-07-6P 620623-12-3P
620623-13-4P 620623-14-5P 620623-53-2P
620623-54-3P 620623-55-4P 620623-56-5P
620623-57-6P 620623-58-7P 620623-59-8P
620623-60-1P 620623-81-6P 620624-61-5P
620624-62-6P 620624-63-7P 620624-65-9P
620624-78-4P 620624-86-4P 620624-87-5P
620624-88-6P 620624-89-7P 620624-91-1P
620624-99-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

RN 609361-22-0 HCAPLUS

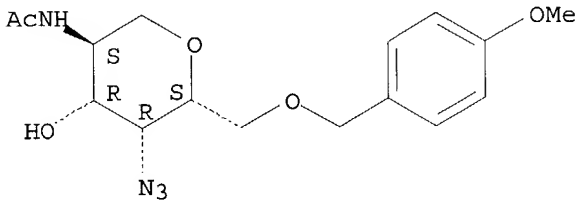
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H)-pyrimidinylidene)methyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



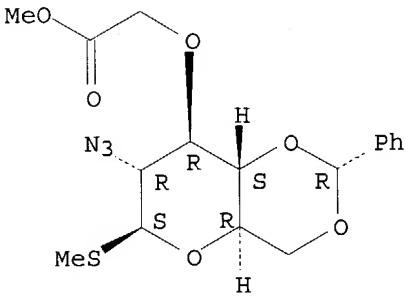
RN 609361-50-4 HCAPLUS
CN D-Galactitol, 2-(acetylamino)-1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



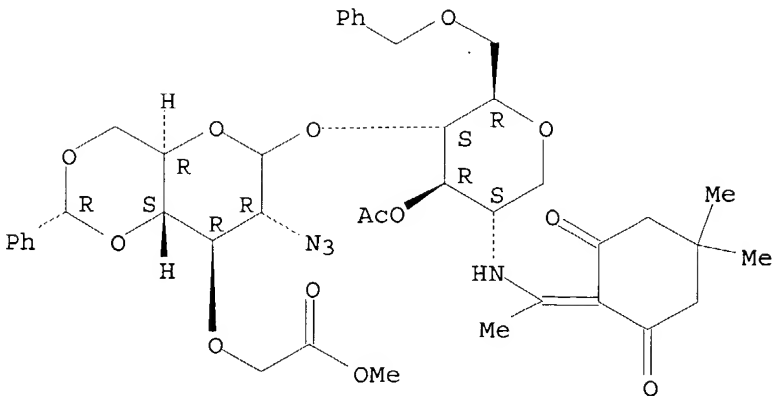
RN 620622-97-1 HCAPLUS
CN β-D-Glucopyranoside, methyl 2-azido-2-deoxy-3-O-(2-methoxy-2-oxoethyl)-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



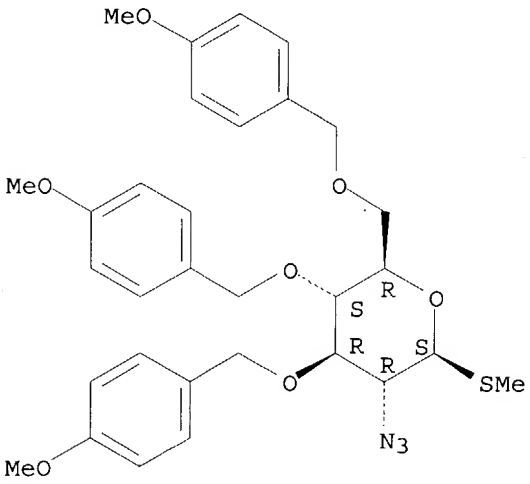
RN 620623-02-1 HCAPLUS
CN D-Glucitol, 1,5-anhydro-4-O-[2-azido-2-deoxy-3-O-(2-methoxy-2-oxoethyl)-4,6-O-[(R)-phenylmethylene]-D-glucopyranosyl]-2-deoxy-2-[[1-(4,4-dimethyl-2,6-dioxocyclohexylidene)ethyl]amino]-6-O-(phenylmethyl)-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 620623-07-6 HCAPLUS
CN β-D-Glucopyranoside, methyl 2-azido-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 620623-12-3 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[(trifluoroacetyl)amino]-β-D-glucopyranosyl]-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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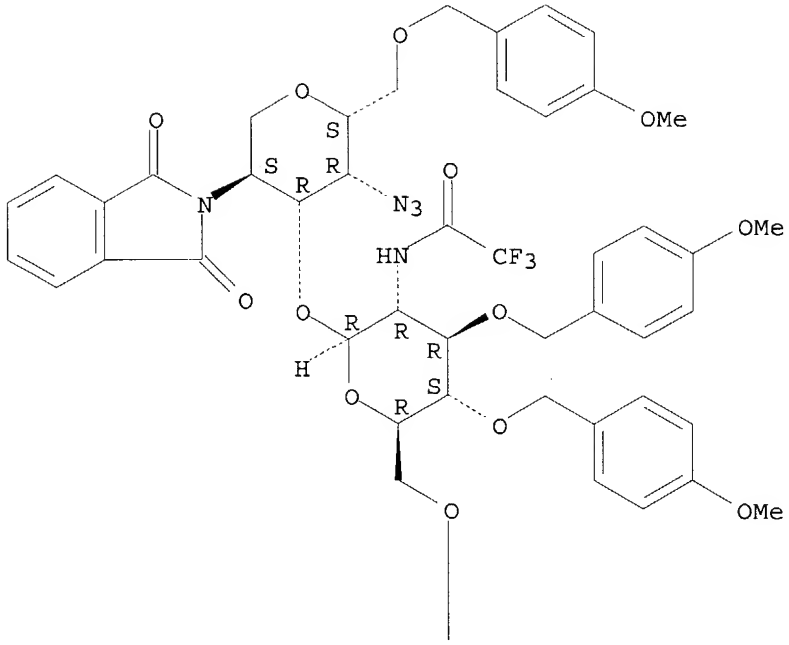

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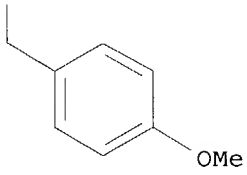
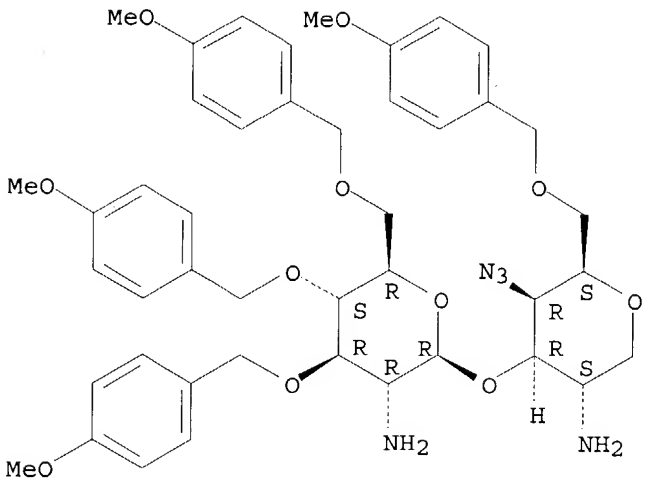


RN 620623-13-4 HCAPLUS
CN D-Galactitol, 2-amino-3-O-[2-amino-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 620623-14-5 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]-β-D-glucopyranosyl]-6-O-[(4-methoxyphenyl)methyl]-2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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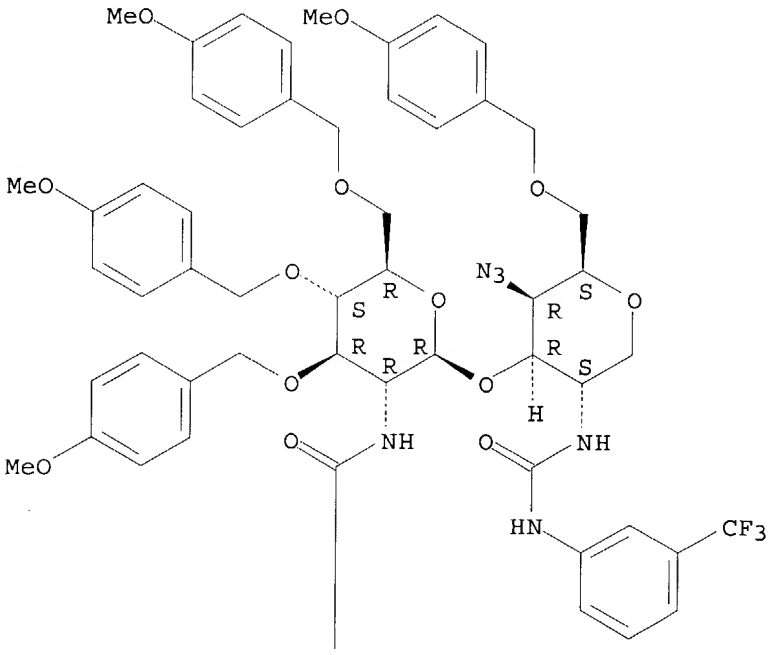

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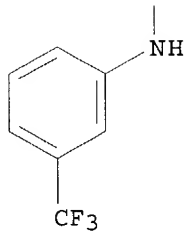

RN 620623-53-2 HCAPLUS
CN D-Galactitol, 3-O-[2-amino-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-1,5-anhydro-4-azido-2,4-dideoxy-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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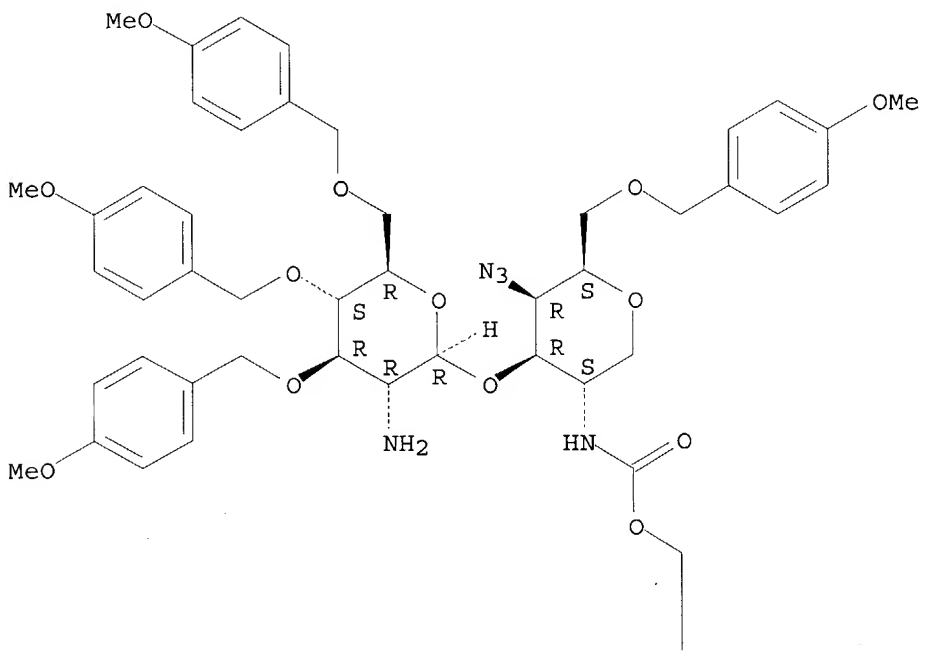

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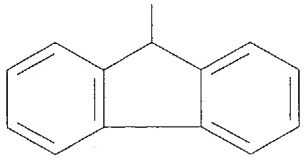

RN 620623-54-3 HCAPLUS

CN D-Galactitol, 3-O-[2-(acetylamino)-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-1,5-anhydro-4-azido-2,4-dideoxy-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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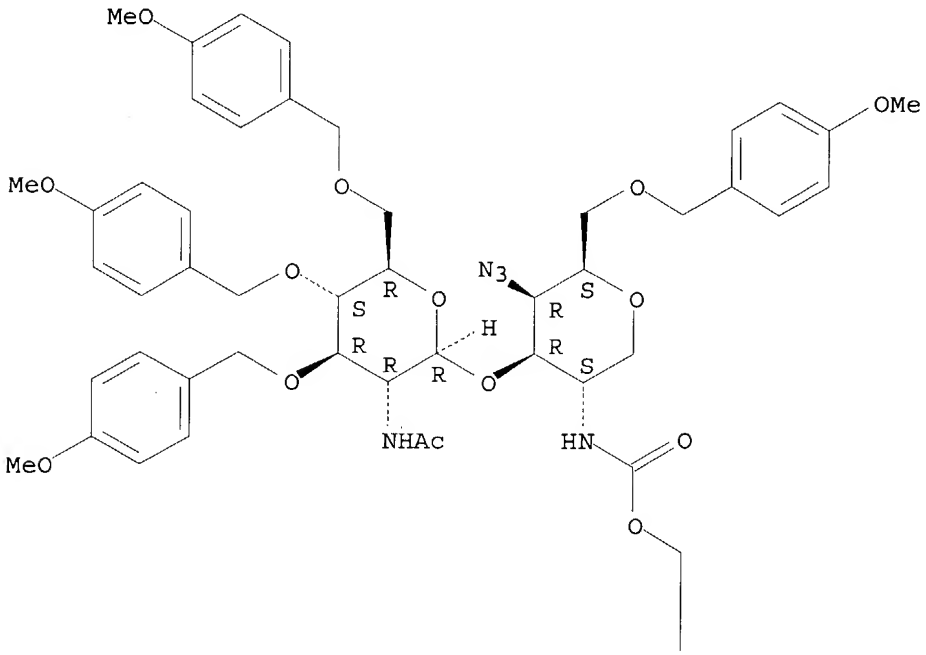

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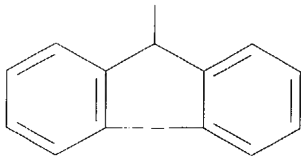

RN 620623-55-4 HCAPLUS

CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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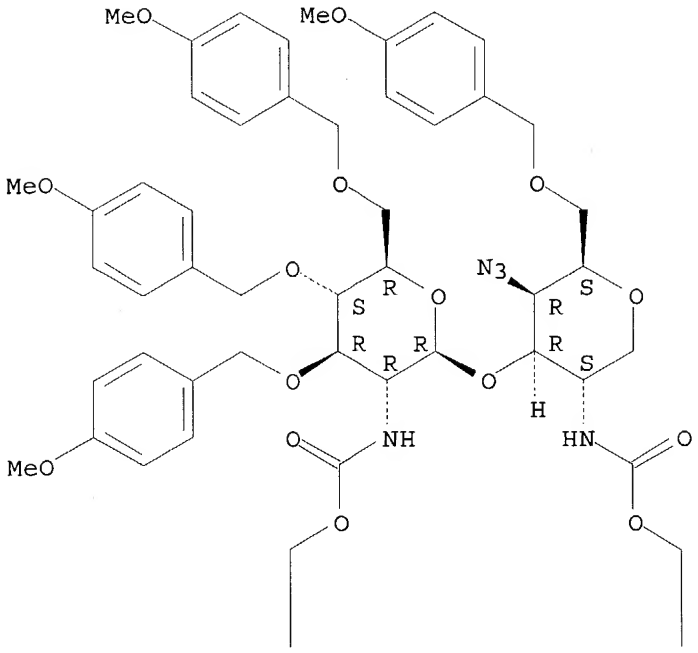

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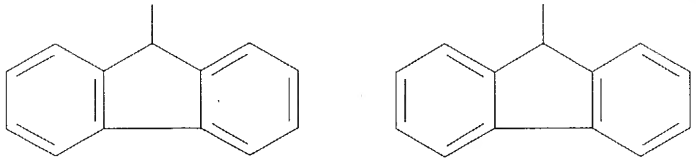

RN 620623-56-5 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[3-(trifluoromethyl)benzoyl]amino]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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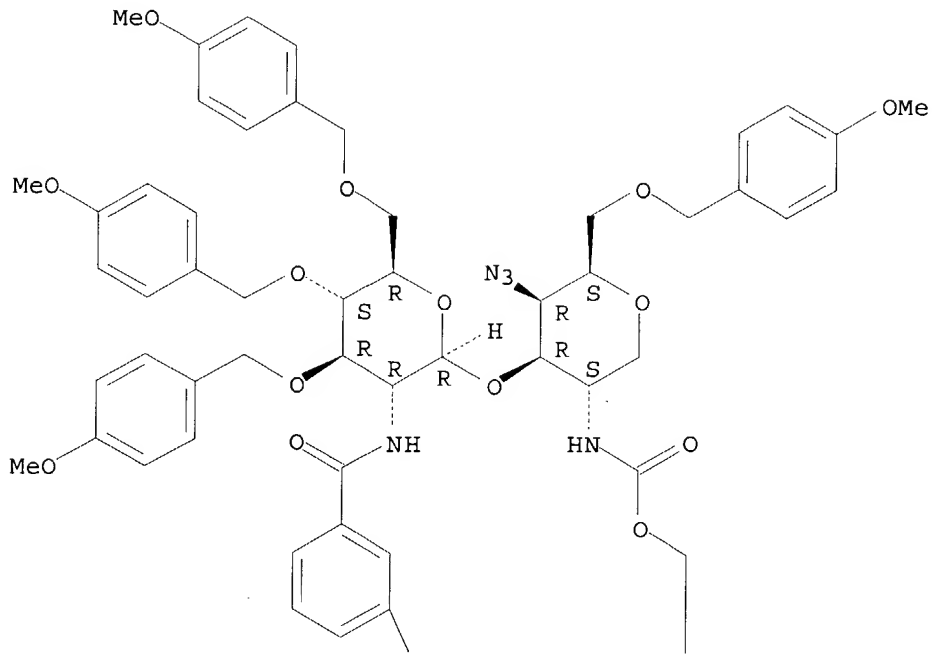

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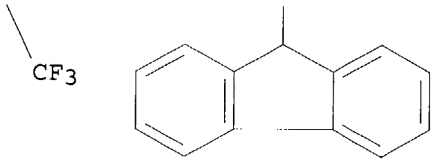

RN 620623-57-6 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[(4-methylphenyl)sulfonyl]amino]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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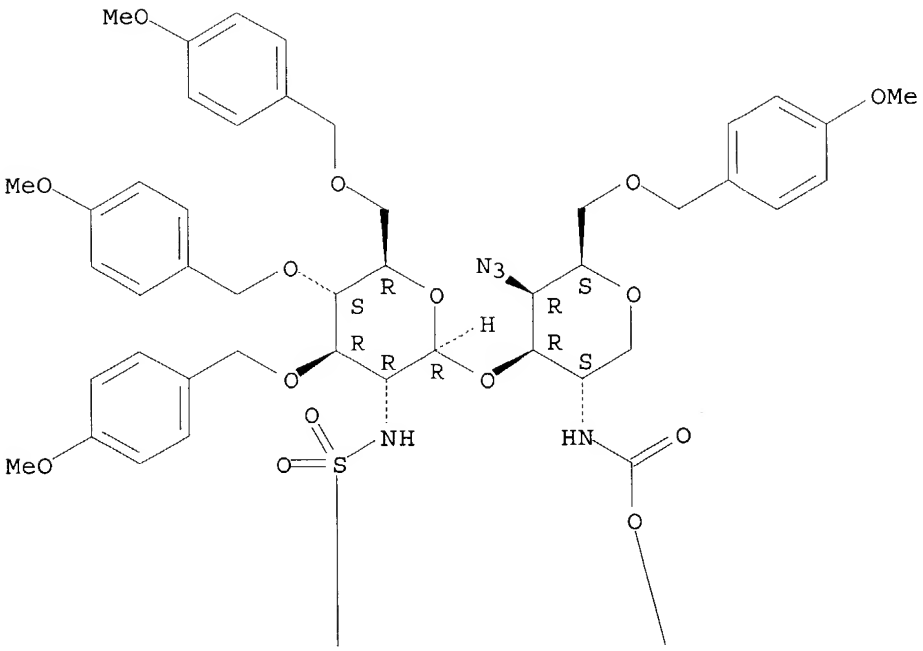

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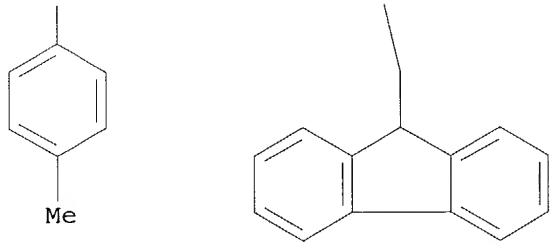

RN 620623-58-7 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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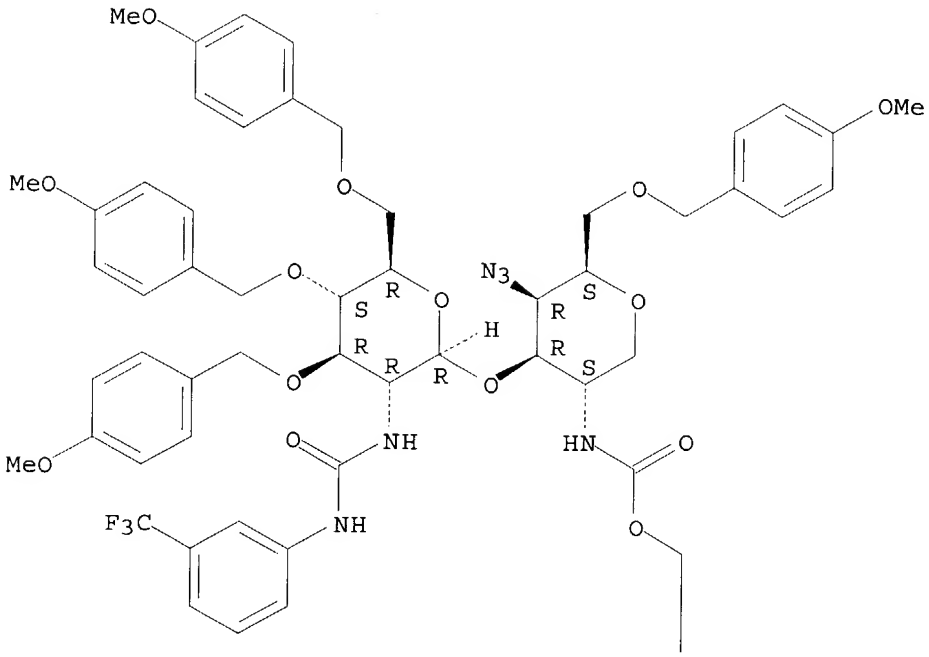

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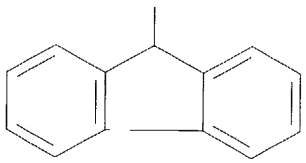
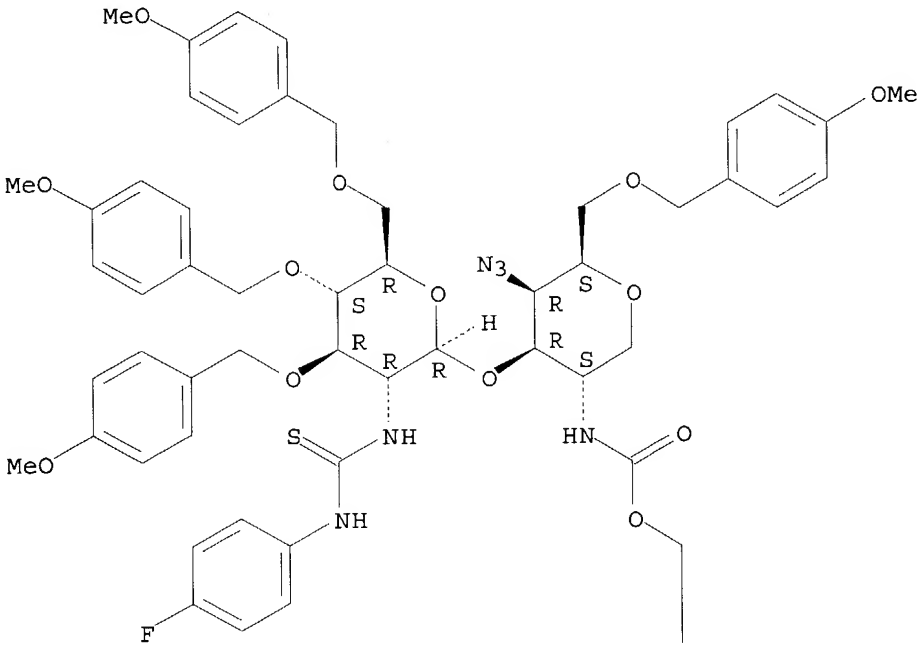


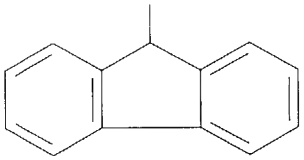
RN 620623-59-8 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-2-[[[(4-fluorophenyl)amino]thioxomethyl]amino]-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



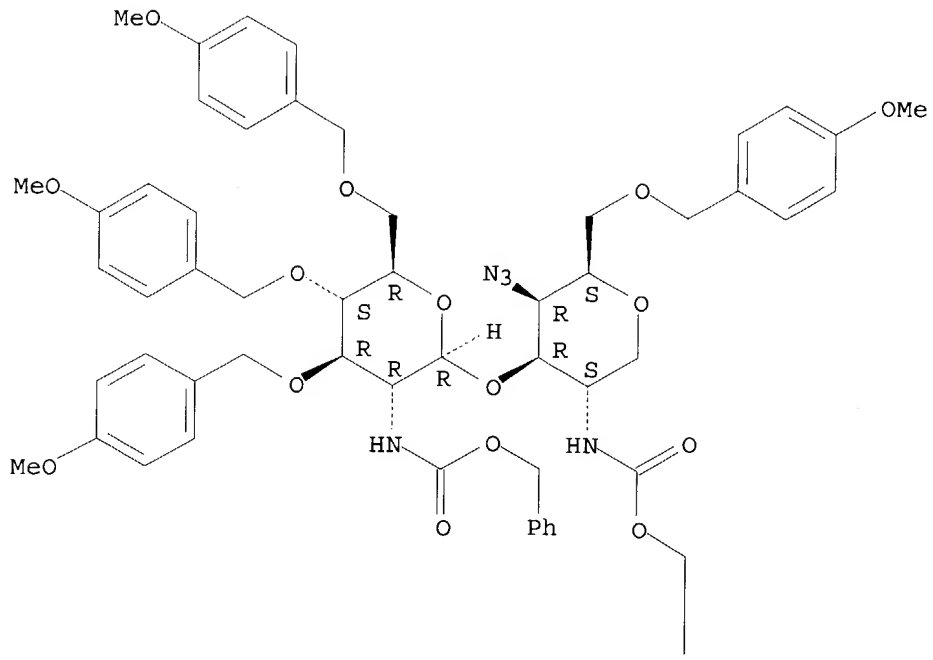
PAGE 2-A



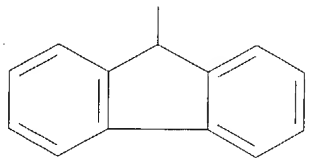
RN 620623-60-1 HCAPLUS.
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[(phenylmethoxy)carbonyl]amino]-β-D-glucopyranosyl]-2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

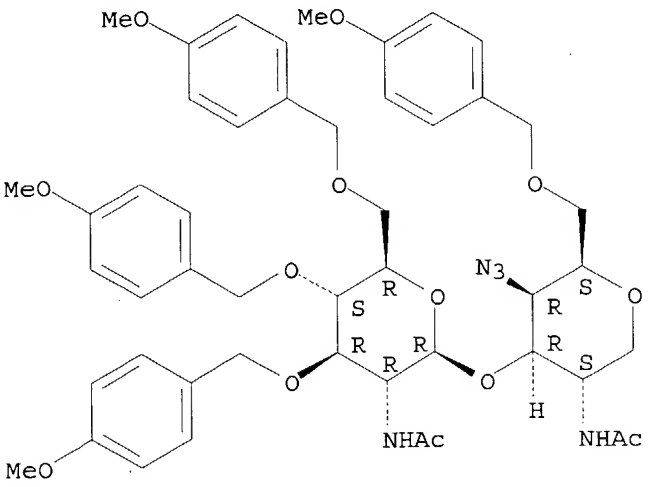


PAGE 2-A



RN 620623-81-6 HCAPLUS
CN D-Galactitol, 2-(acetylamino)-3-O-[2-(acetylamino)-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

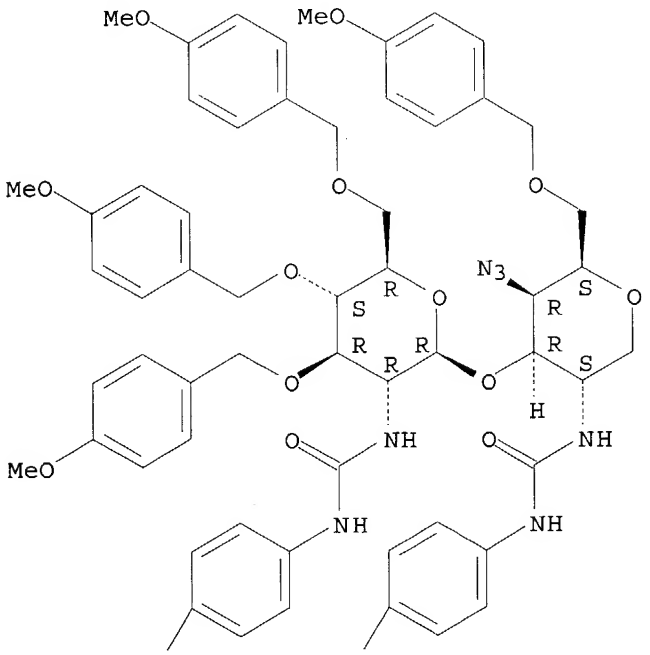
Absolute stereochemistry.



RN 620624-61-5 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]-β-D-glucopyranosyl]-6-O-[(4-methoxyphenyl)methyl]-2-[[[[4-(trifluoromethyl)phenyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

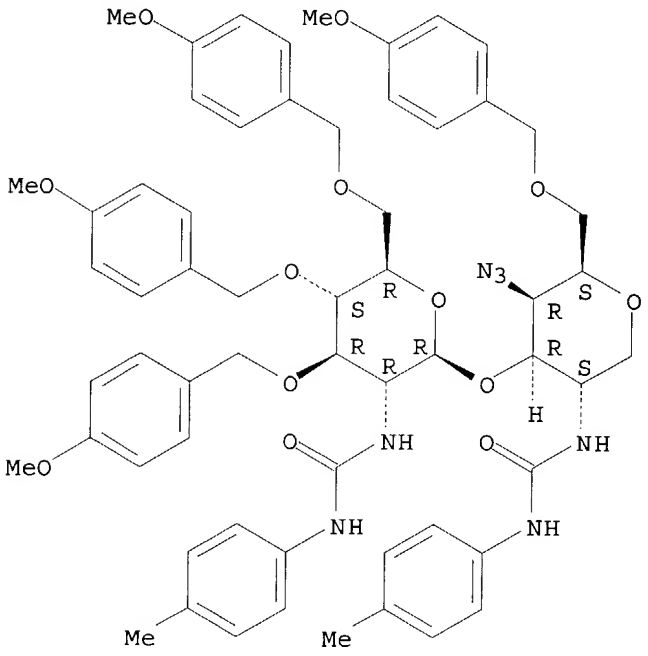
Absolute stereochemistry.

PAGE 1-A



RN 620624-62-6 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[[(4-methylphenyl)amino]carbonyl]amino]-β-D-glucopyranosyl]-6-O-[(4-methoxyphenyl)methyl]-2-[[[(4-methylphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

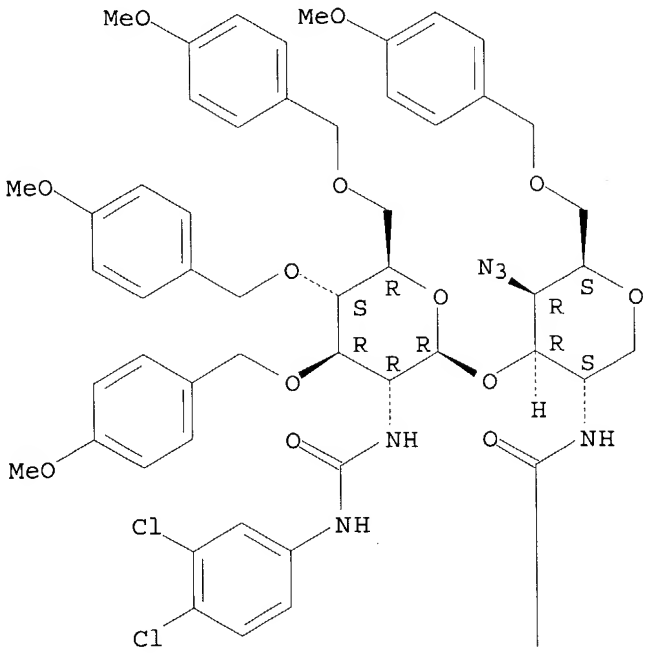
Absolute stereochemistry.



RN 620624-63-7 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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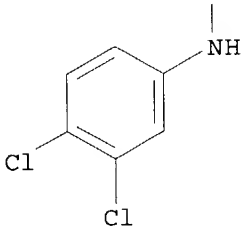
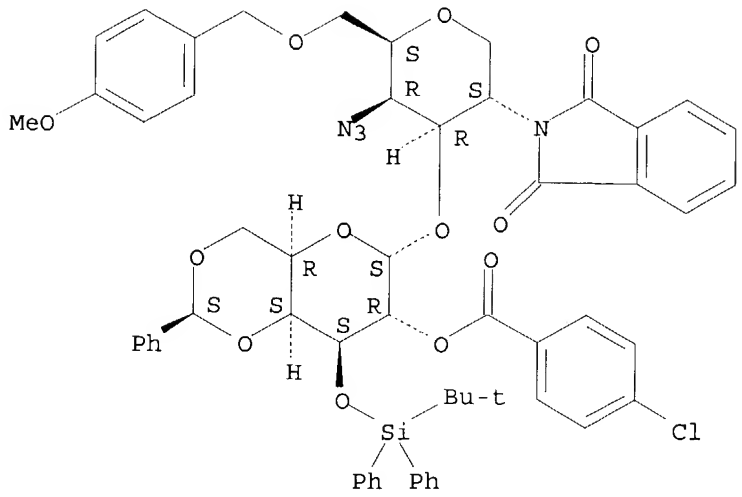


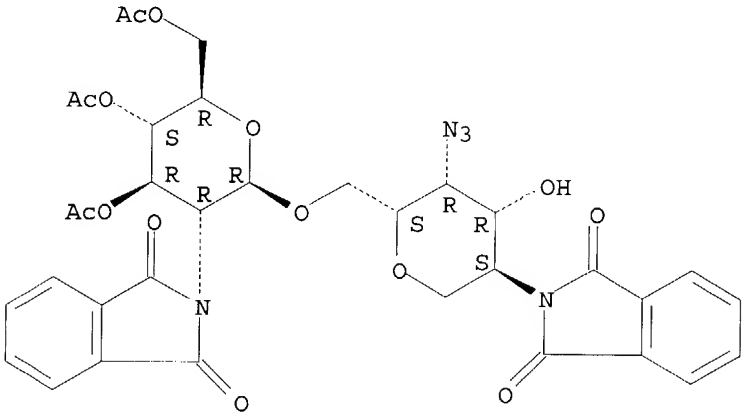
RN 620624-65-9 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-3-O-[2-O-(4-chlorobenzoyl)-3-O-[(1,1-dimethylethyl)diphenylsilyl]-4,6-O-[(S)-phenylmethylene]-α-D-galactopyranosyl]-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



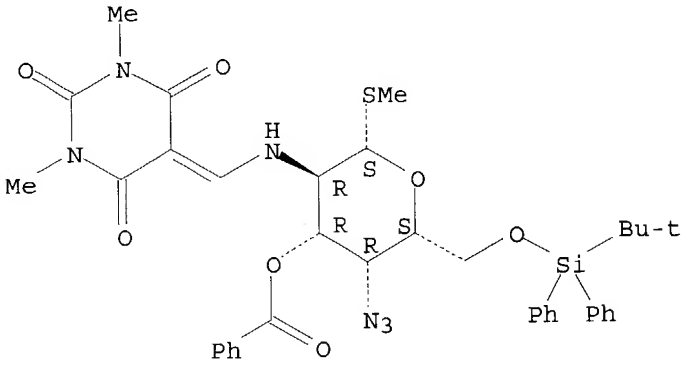
RN 620624-78-4 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[3,4,6-tri-O-acetyl-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-β-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



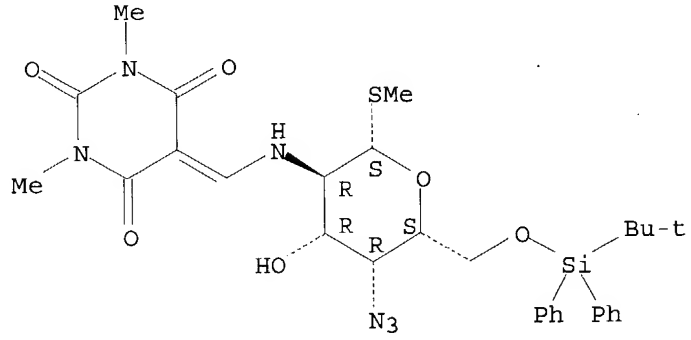
RN 620624-86-4 HCAPLUS
CN β-D-Galactopyranoside, methyl 4-azido-2,4-dideoxy-6-O-[(1,1-dimethylethyl)diphenylsilyl]-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H)-pyrimidinylidene)methyl]amino]-1-thio-, 3-benzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



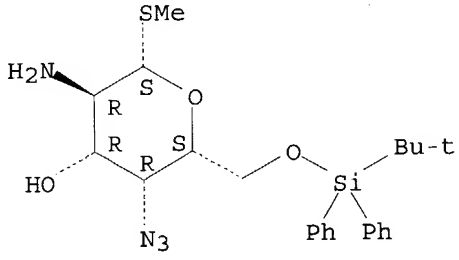
RN 620624-87-5 HCAPLUS
CN β-D-Galactopyranoside, methyl 4-azido-2,4-dideoxy-6-O-[(1,1-dimethylethyl)diphenylsilyl]-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H)-pyrimidinylidene)methyl]amino]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



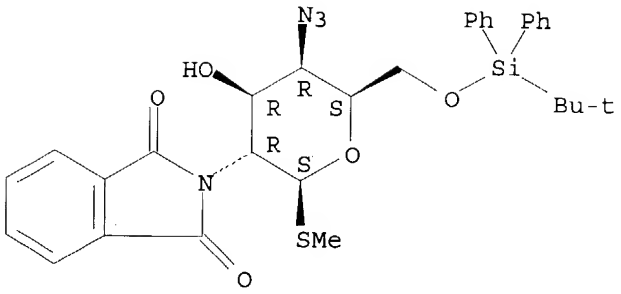
RN 620624-88-6 HCAPLUS
CN β-D-Galactopyranoside, methyl 2-amino-4-azido-2,4-dideoxy-6-O-[(1,1-dimethylethyl)diphenylsilyl]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



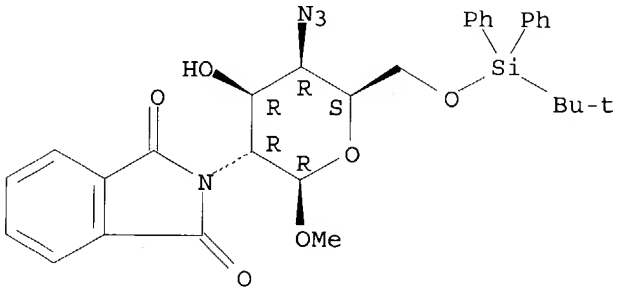
RN 620624-89-7 HCAPLUS
CN β-D-Galactopyranoside, methyl 4-azido-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(1,1-dimethylethyl)diphenylsilyl]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



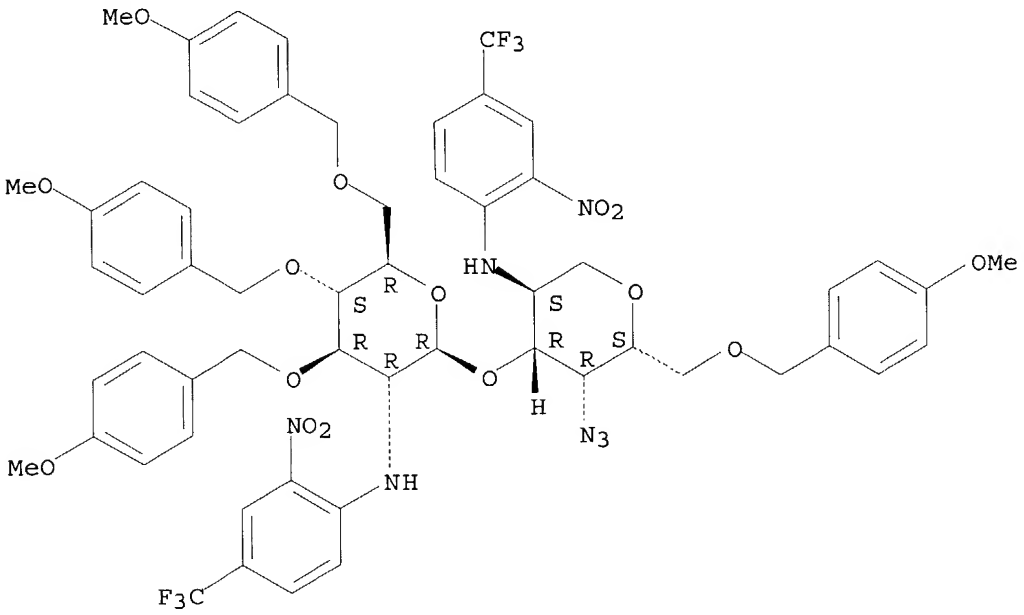
RN 620624-91-1 HCAPLUS
CN β-D-Galactopyranoside, methyl 4-azido-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(1,1-dimethylethyl)diphenylsilyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 620624-99-9 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[[2-nitro-4-(trifluoromethyl)phenyl]amino]-β-D-glucopyranosyl]-6-O-[(4-methoxyphenyl)methyl]-2-[[2-nitro-4-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

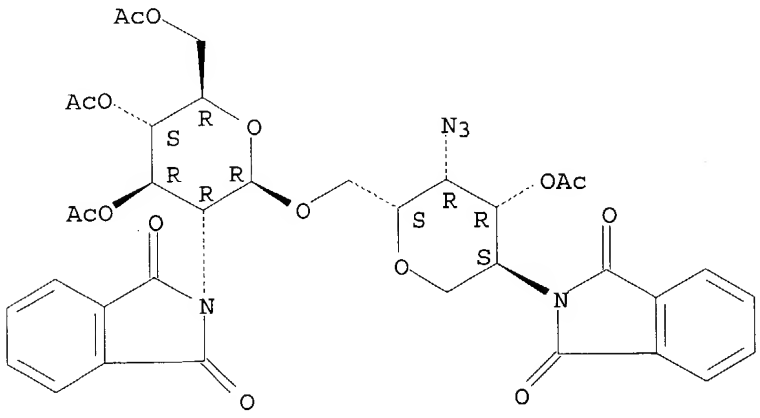


IT **620624-79-5P 620624-93-3P 620625-00-5P**
620625-02-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(combinatorial library solid phase synthesis of disaccharides for drug discovery)

RN 620624-79-5 HCAPLUS

CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[3,4,6-tri-O-acetyl-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-β-D-glucopyranosyl]-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

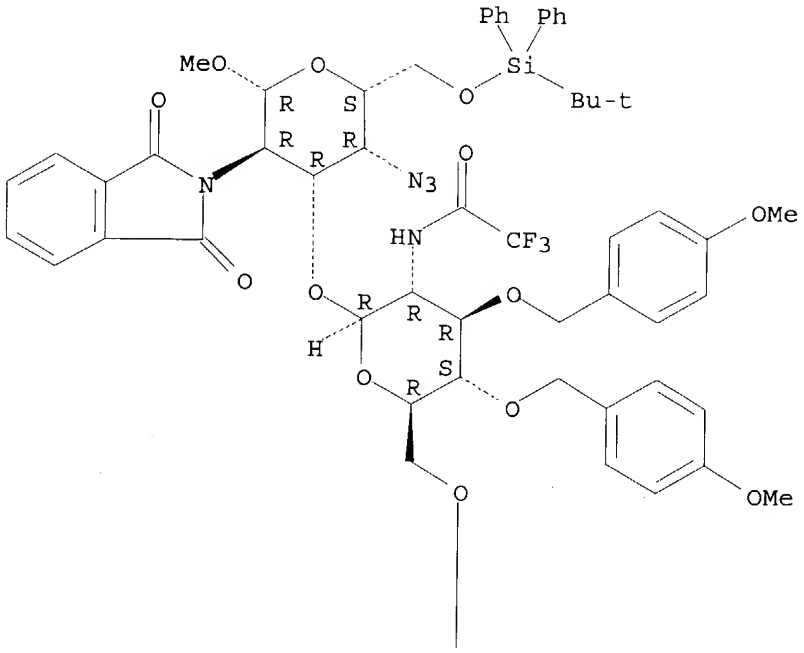


RN 620624-93-3 HCAPLUS

CN β-D-Galactopyranoside, methyl 4-azido-2,4-dideoxy-3-O-[2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-2-[(trifluoroacetyl)amino]-β-D-glucopyranosyl]-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-[(1,1-dimethylethyl)diphenylsilyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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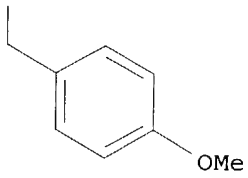
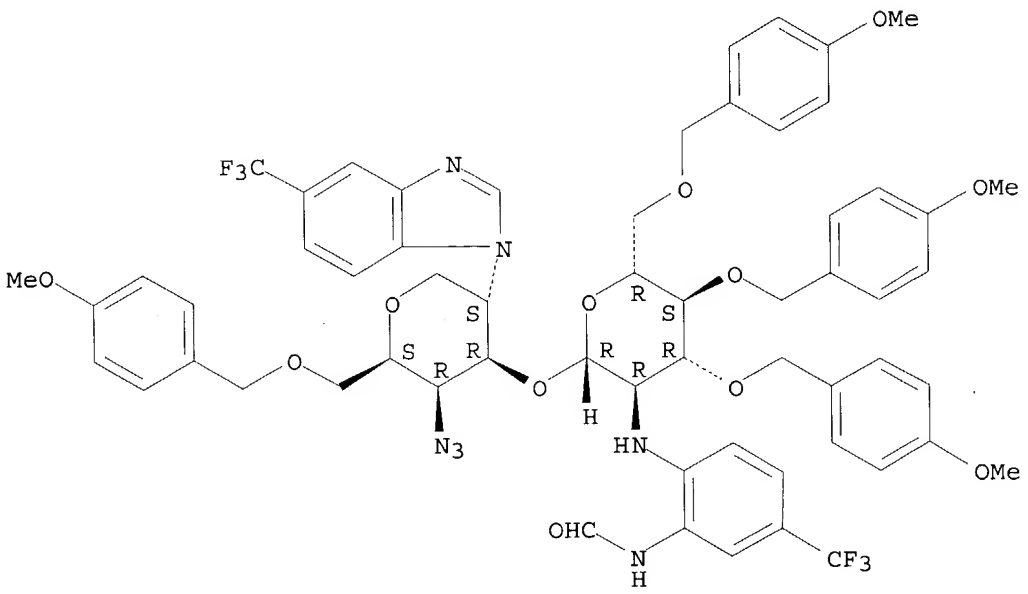


RN 620625-00-5 HCAPLUS
CN D-Galactitol, 1,5-anhydro-4-azido-2,4-dideoxy-3-O-[2-deoxy-2-[[2-(formylamino)-4-(trifluoromethyl)phenyl]amino]-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-6-O-[(4-methoxyphenyl)methyl]-2-[5-(trifluoromethyl)-1H-benzimidazol-1-yl]- (9CI) (CA INDEX NAME)

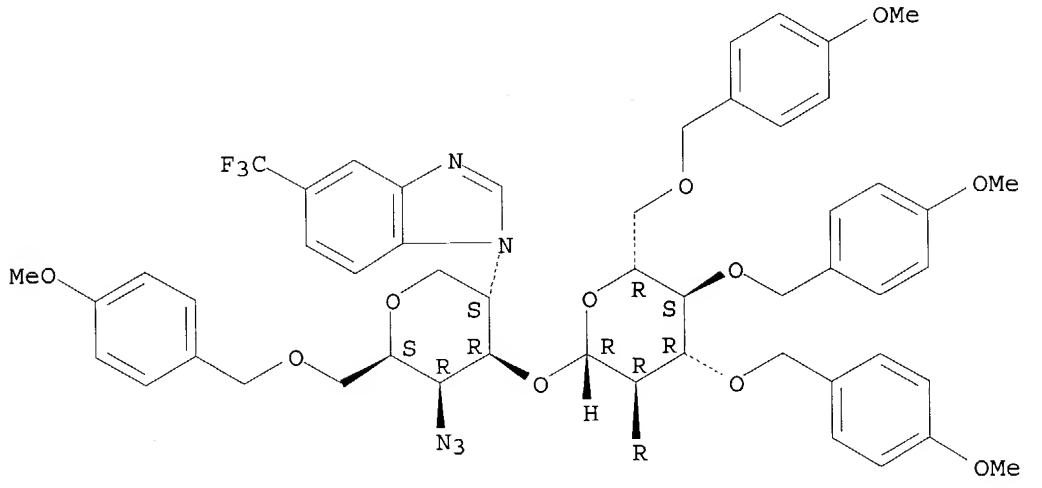
Absolute stereochemistry.

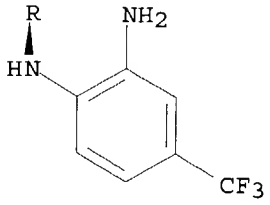


RN 620625-02-7 HCAPLUS
CN D-Galactitol, 3-O-[2-[[2-amino-4-(trifluoromethyl)phenyl]amino]-2-deoxy-3,4,6-tris-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]-1,5-anhydro-4-azido-2,4-dideoxy-6-O-[(4-methoxyphenyl)methyl]-2-[5-(trifluoromethyl)-1H-benzimidazol-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



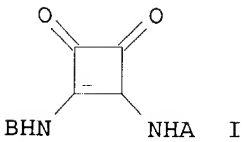


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:855697 HCAPLUS
DOCUMENT NUMBER: 139:364941
TITLE: Preparation of 3,4-diaminocyclobutene-1,2-diones as CXC chemokine receptor antagonists
INVENTOR(S): Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Pachter, Jonathan A.; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Nelson, Kingsley H.; Rokosz, Laura L.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 127 pp., Cont.-in-part of U.S. Ser. No. 62,006.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2003204085	A1	20031030	US 2002-208426		20020730
US 2003097004	A1	20030522	US 2002-62006		20020201
PRIORITY APPLN. INFO.:			US 2001-265951P	P	20010202
			US 2002-62006	A2	20020201

OTHER SOURCE(S): MARPAT 139:364941
GI



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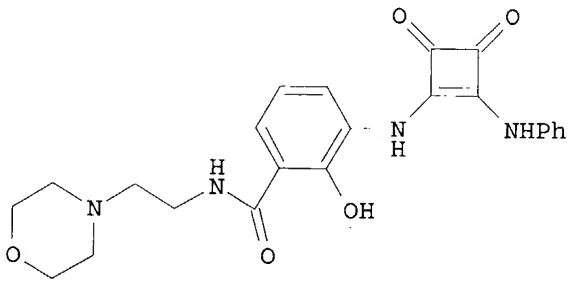


II

AB Title compds. I [A = (substituted) aryl, heteroaryl; B = (substituted) Ph, benzotriazolyl, benzimidazolyl, hydroxyimidazolyl, hydroxythienyl, hydroxypyrrolyl, etc.], useful for treating chemokine mediated diseases

selected from psoriasis, atopic dermatitis, asthma, arthritis, cancer, etc., were prepared Thus, 1-ethoxy-2-phenylamino-1-cyclobutene-3,4-dione (preparation given) and 2-OH-3-[(2-morpholinoethyl)aminocarbonyl]aniline (preparation given) were refluxed overnight in EtOH to give 34% title compound (II). I showed CXCR2 receptor binding activity in the range of 1-10000 nM. Pharmaceutical composition comprising the compound I is claimed.

IC ICM C07D277-56
ICS C07D263-34; C07D257-04; C07C225-18

NCL 544320000; 544408000; 546304000; 548194000; 548234000; 548254000; 548261000; 548309700; 548503000; 549434000

CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 25, 27, 63

IT Angiogenesis
Angiogenesis inhibitors
Anti-AIDS agents
Anti-Alzheimer's agents
Anti-inflammatory agents
Antiarthritics
Antiasthmatics
Anticoagulants
Antimalarials
Antitumor agents
Antiviral agents
Human
Immunosuppressants
Solid phase synthesis
(preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

IT 50-35-1, Thalidomide 145-63-1, Suramin 15866-90-7, Col-3 33069-62-4, Taxol **37270-94-3**, Platelet factor 4 38101-59-6, Im862 86090-08-6, Angiostatin 99519-84-3, CAI 114977-28-5, Taxotere 129298-91-5, Tnp-470 148717-90-2, Squalamine 154039-60-8, Marimastat 169799-04-6, Cgs27023a 187888-07-9, Endostatin 188968-51-6, Emd121974 192329-42-3, Ag3340 204005-46-9, Su-5416 212142-18-2, PTK 787 216974-75-3 252916-29-3, Su-6668 259188-38-0, Bms-275291 305838-77-1, Neovastat 324740-00-3, Vitaxin 386211-13-8, Zd-101 443913-73-3, Zd-6474
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

IT **37270-94-3**, Platelet factor 4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

RN 37270-94-3 HCAPLUS
CN Blood platelet factor 4 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L20 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:731217 HCAPLUS
DOCUMENT NUMBER: 140:181678
TITLE: Synthesis of heparin-like oligosaccharides on a soluble polymer support
AUTHOR(S): Ojeda, Rafael; de Paz, Jose-Luis; Martin-Lomas, Manuel
CORPORATE SOURCE: Grupo de Carbohidratos, Instituto de Investigaciones Quimicas, CSIC, Seville, E-41092, Spain
SOURCE: Chemical Communications (Cambridge, United Kingdom) (2003), (19), 2486-2487

CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Based on previously developed solution phase chemical, an effective general approach to the synthesis of heparin-like oligosaccharides on a soluble polymer support is reported.

CC 33-8 (Carbohydrates)

IT **Solid phase synthesis**
(solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(sulfated; solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

IT **382614-16-6 382614-20-2 382614-21-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

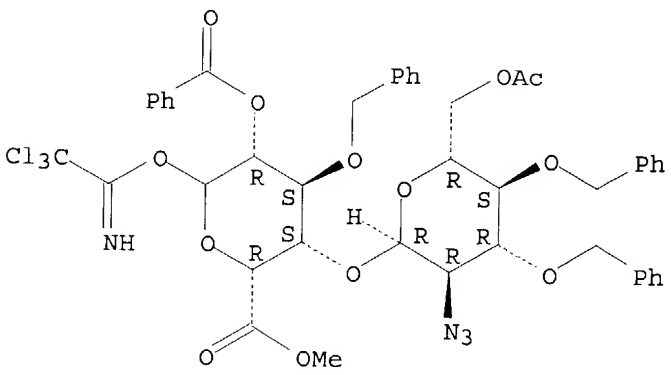
IT **657409-73-9P 657409-74-0DP**, polymer bound **657409-74-0P 657409-75-1DP**, polymer bound **657409-76-2DP**, polymer bound **657409-77-3DP**, polymer bound **657409-78-4DP**, polymer bound **657409-79-5DP**, polymer bound **657409-80-8DP**, polymer bound **657409-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

IT **382614-16-6 382614-20-2 382614-21-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

RN 382614-16-6 HCAPLUS

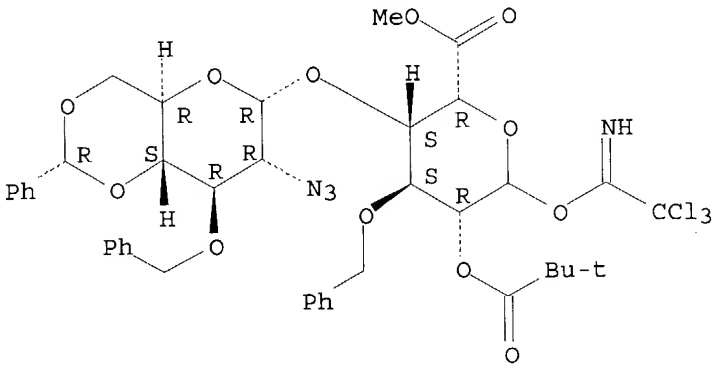
CN L-Idopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-benzoate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



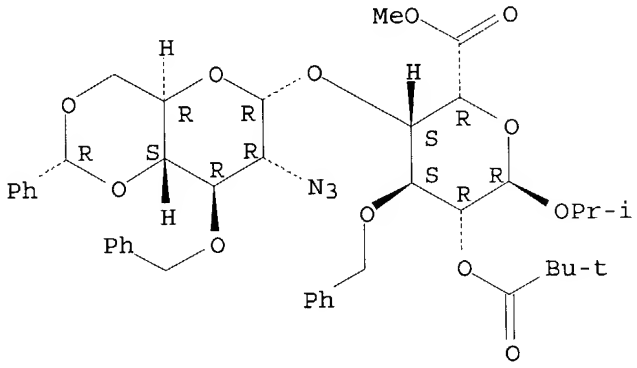
RN 382614-20-2 HCAPLUS
CN L-Idopyranuronic acid, 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2,2-dimethylpropanoate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 382614-21-3 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

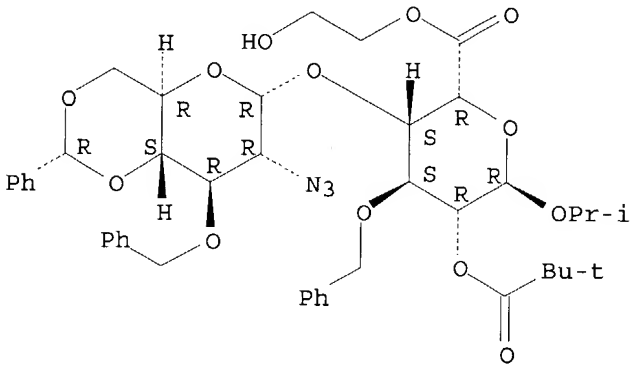


IT **657409-73-9P 657409-74-0DP**, polymer bound
657409-74-0P 657409-75-1DP, polymer bound
657409-76-2DP, polymer bound **657409-77-3DP**, polymer bound **657409-78-4DP**, polymer bound **657409-79-5DP**, polymer bound **657409-80-8DP**, polymer bound **657409-81-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid phase synthesis of heparin-like oligosaccharides for use as chiral synthons toward the preparation of heparan sulfate glycosaminoglycans)

RN 657409-73-9 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-3-O-

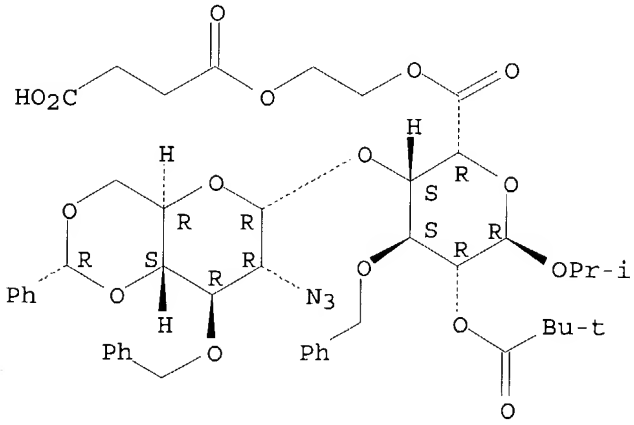
(phenylmethyl)-, 2-hydroxyethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



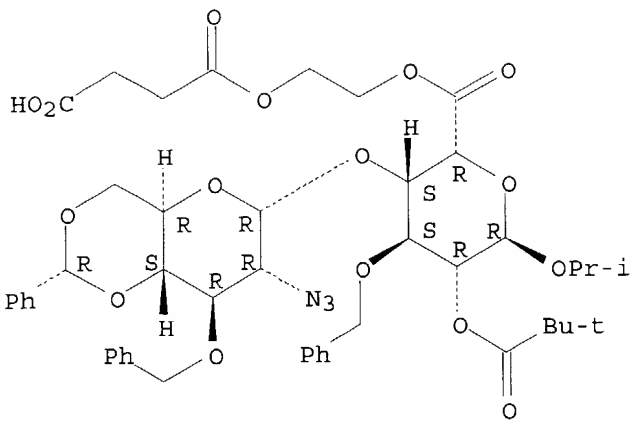
RN 657409-74-0 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



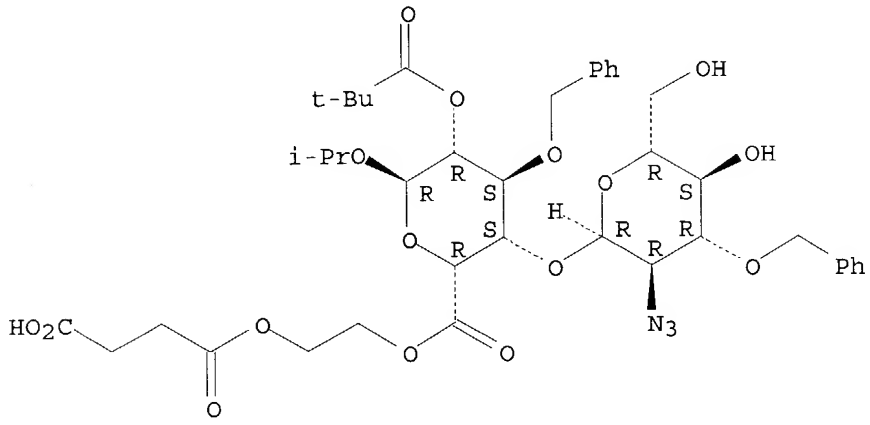
RN 657409-74-0 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



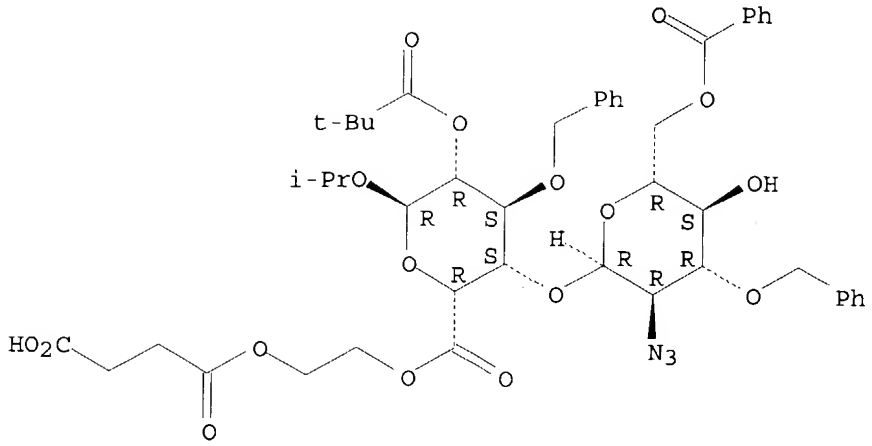
RN 657409-75-1 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 657409-76-2 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl 4-O-[2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

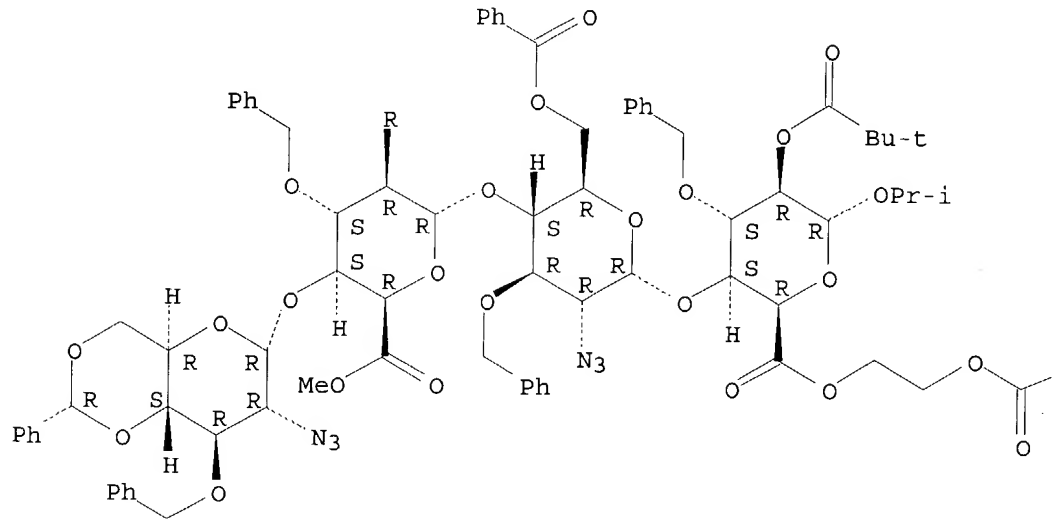
Absolute stereochemistry.



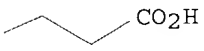
RN 657409-77-3 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl O-2-azido-2-deoxy-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl-(1→4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

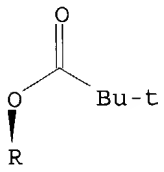
PAGE 1-A



PAGE 1-B



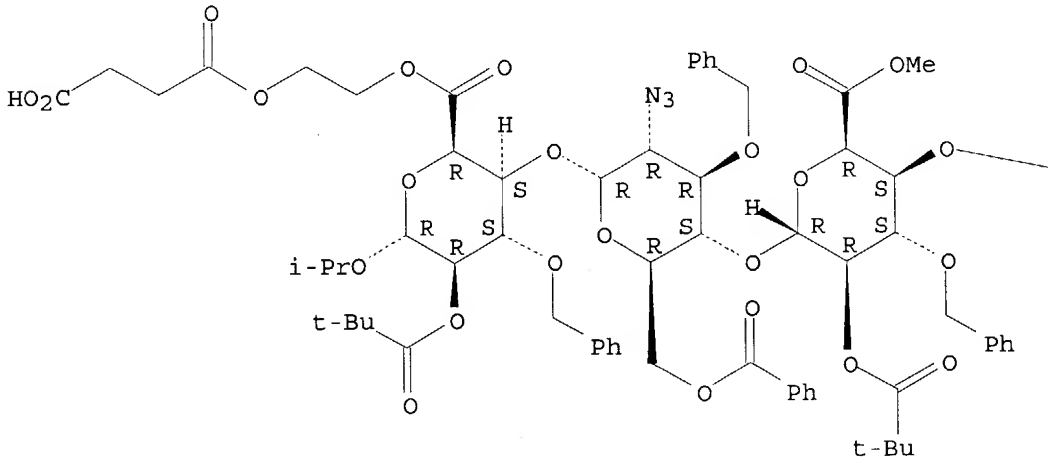
PAGE 2-A



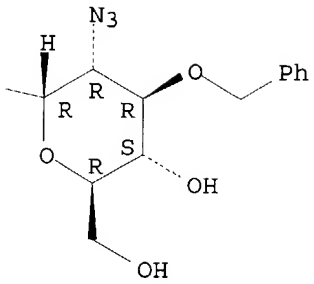
RN 657409-78-4 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl O-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



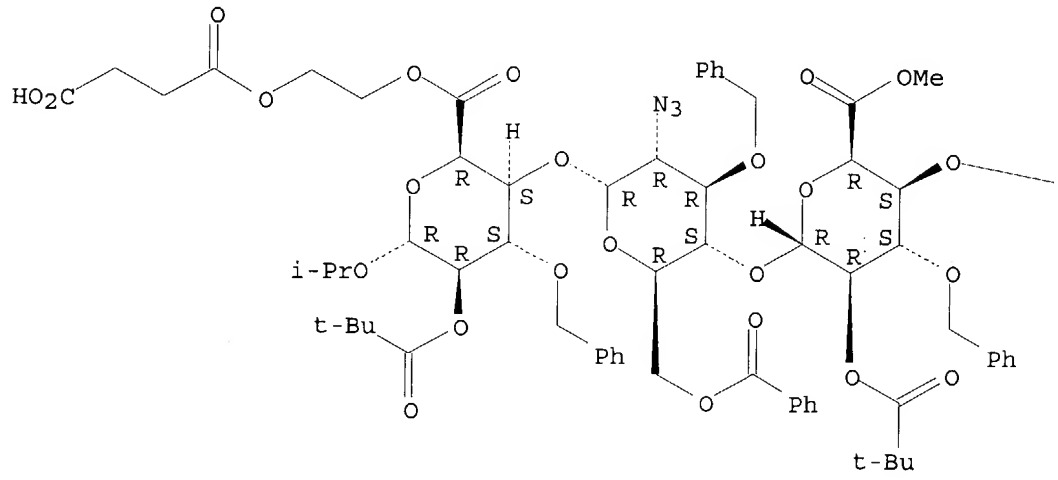
PAGE 1-B



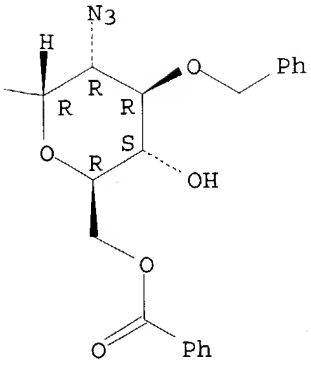
RN 657409-79-5 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



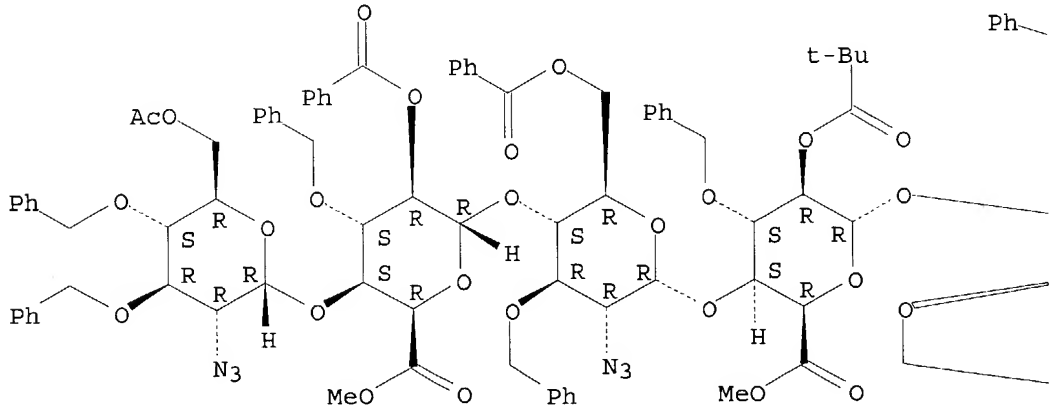
PAGE 1-B



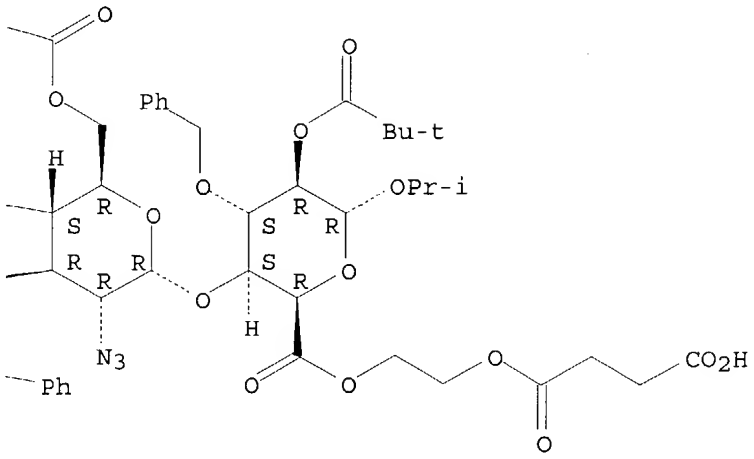
RN 657409-80-8 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl O-6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-benzoyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-6-O-benzoyl-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, 2-(3-carboxy-1-oxopropoxy)ethyl ester, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



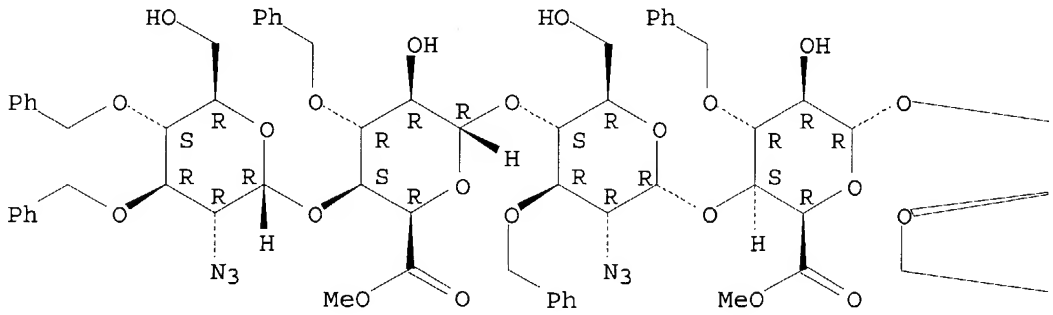
PAGE 1-B

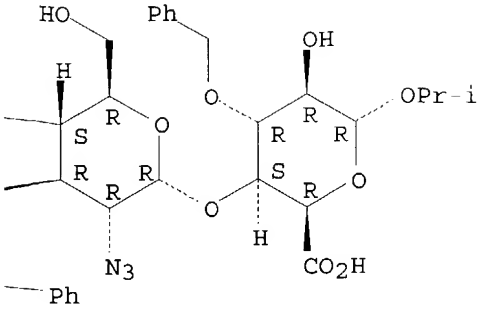


RN 657409-81-9 HCAPLUS
CN α-L-Idopyranosiduronic acid, 1-methylethyl O-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:808723 HCAPLUS
DOCUMENT NUMBER: 138:287939
TITLE: Preparation of core 2 type tetrasaccharide carrying decapeptide by benzyl protection-based solid-phase synthesis strategy
AUTHOR(S): Takano, Yutaka; Habiro, Motoki; Someya, Masaomi; Hojo, Hironobu; Nakahara, Yoshiaki
CORPORATE SOURCE: Institute of Glycotechnology, Department of Applied Biochemistry, Tokai University, Hiratsuka, Kanagawa, 259-1292, Japan
SOURCE: Tetrahedron Letters (2002), 43(46), 8395-8399
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:287939

AB β-D-Gal-(1→4)-β-D-GlcNAc-[β-D-Gal-(1→3)]-α-D-GalNAc-(1→3)-L-Ser/Thr building blocks for solid-phase synthesis of glycopeptide were stereoselectively synthesized in a benzyl-protected form. The key glycosylation reaction to form β-D-GlcNAc linkage was established by the use of protected N-trichloroacetyl-D-lactosaminyl fluoride. Usefulness of the building block was demonstrated by solid-phase synthesis of a segment of human leukosialin. The benzyl protecting group was efficiently removed by low acidity TfOH conditions.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 33

IT **Solid phase synthesis**
(preparation of core tetrasaccharide and solid-phase synthesis of glycopeptide based on leukosialin segment)

IT **Oligosaccharides, preparation**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tetrasaccharides; preparation of core tetrasaccharide and solid-phase synthesis of glycopeptide based on leukosialin segment)

IT 3068-32-4 35661-39-3 68858-20-8 71989-31-6 71989-33-8 71989-35-0 132388-59-1 **144914-16-9 184093-93-4 248927-95-9** 344403-90-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of core tetrasaccharide and solid-phase synthesis of

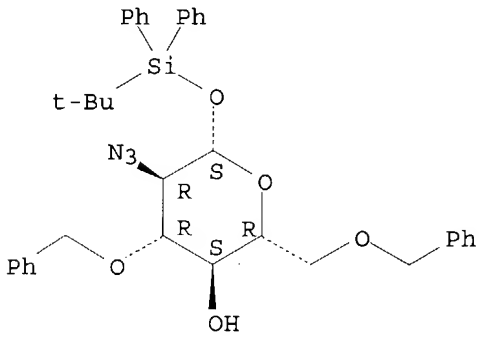
glycopeptide based on leukosialin segment)

IT 496052-66-5P **503830-91-9P 503830-92-0P**
503830-93-1P 503830-94-2P 503830-95-3P
503830-96-4P 503830-97-5P 503830-98-6P 503830-99-7P
503831-00-3P 503831-01-4P **503831-02-5P 503831-03-6P**
503831-04-7P 503831-05-8P 503831-07-0P 503831-09-2DP, resin-bound
503831-10-5DP, resin-bound 503831-11-6DP, resin-bound 503831-12-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of core tetrasaccharide and solid-phase synthesis of glycopeptide based on leukosialin segment)

IT **144914-16-9 184093-93-4 248927-95-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of core tetrasaccharide and solid-phase synthesis of glycopeptide based on leukosialin segment)

RN 144914-16-9 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)diphenylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184093-93-4 HCAPLUS
CN L-Serine, O-[2-azido-2-deoxy-4,6-O-[(S)-phenylmethylene]-3-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl]-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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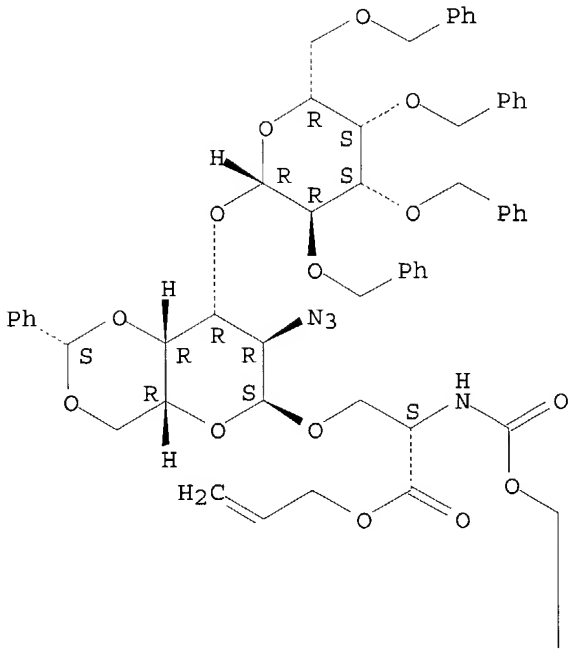
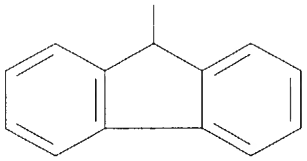


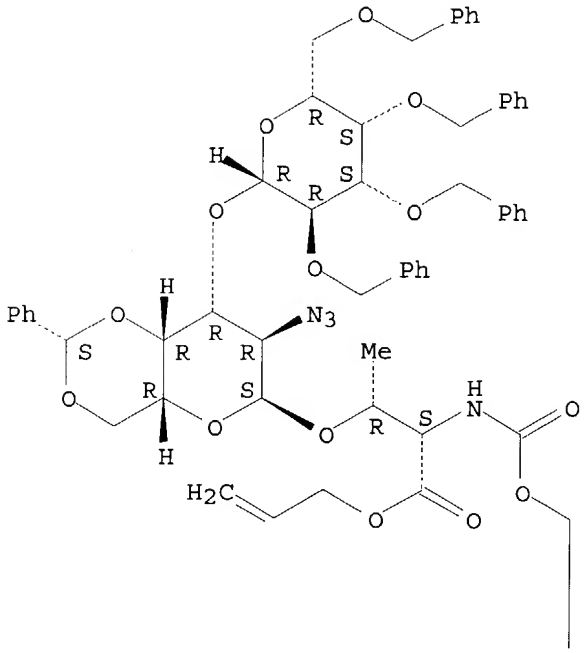
PAGE 2-A



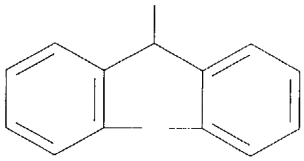
RN 248927-95-9 HCAPLUS
CN L-Threonine, O-[2-azido-2-deoxy-4,6-O-[(S)-phenylmethylene]-3-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl]-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

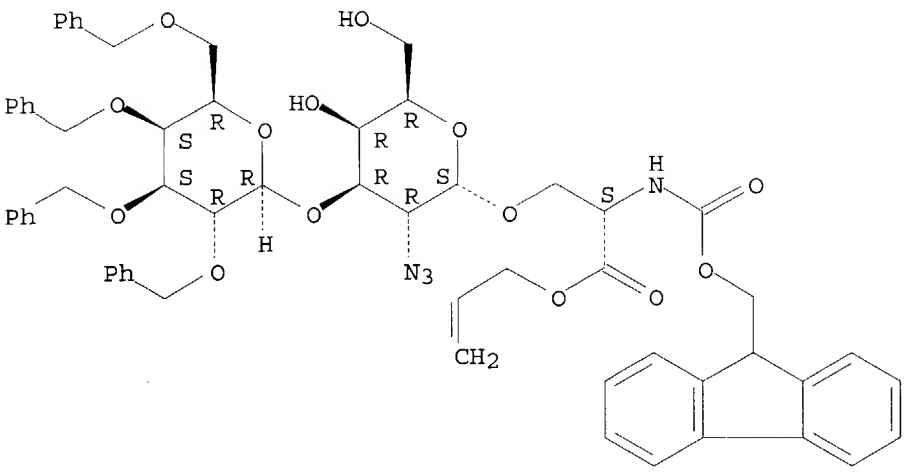


IT **503830-91-9P 503830-92-0P 503830-93-1P**
503830-94-2P 503830-96-4P 503831-02-5P
503831-03-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of core tetrasaccharide and solid-phase synthesis of glycopeptide based on leukosialin segment)

RN 503830-91-9 HCAPLUS

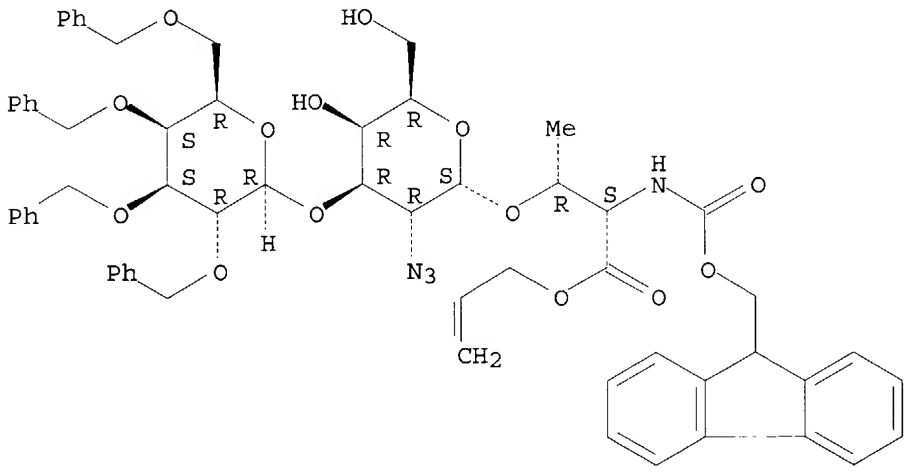
CN L-Serine, O-[2-azido-2-deoxy-3-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl]-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



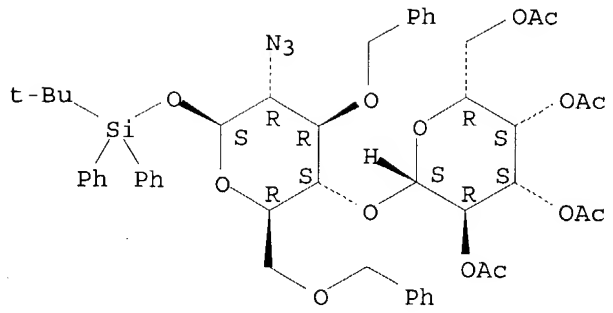
RN 503830-92-0 HCAPLUS
CN L-Threonine, O-[2-azido-2-deoxy-3-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl]-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



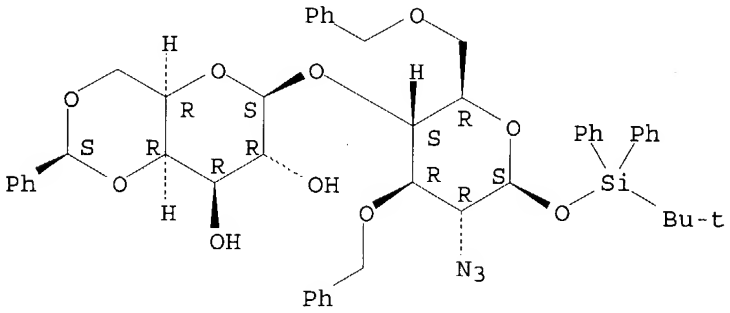
RN 503830-93-1 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)diphenylsilyl]-3,6-bis-O-(phenylmethyl)-4-O-(2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



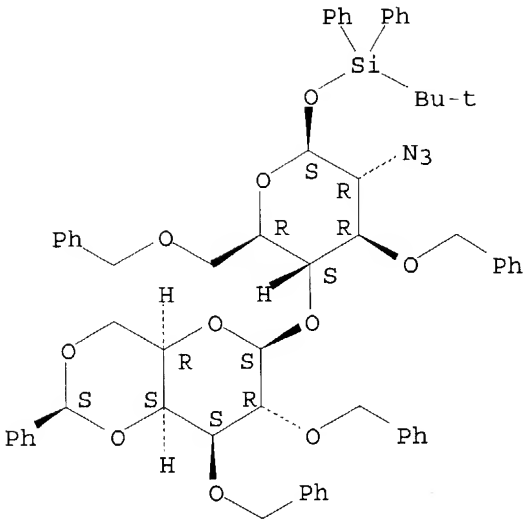
RN 503830-94-2 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)diphenylsilyl]-3,6-bis-O-(phenylmethyl)-4-O-[4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 503830-96-4 HCAPLUS
CN β-D-Glucopyranose, 2-azido-4-O-[2,3-bis-O-(phenylmethyl)-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl]-2-deoxy-1-O-[(1,1-dimethylethyl)diphenylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

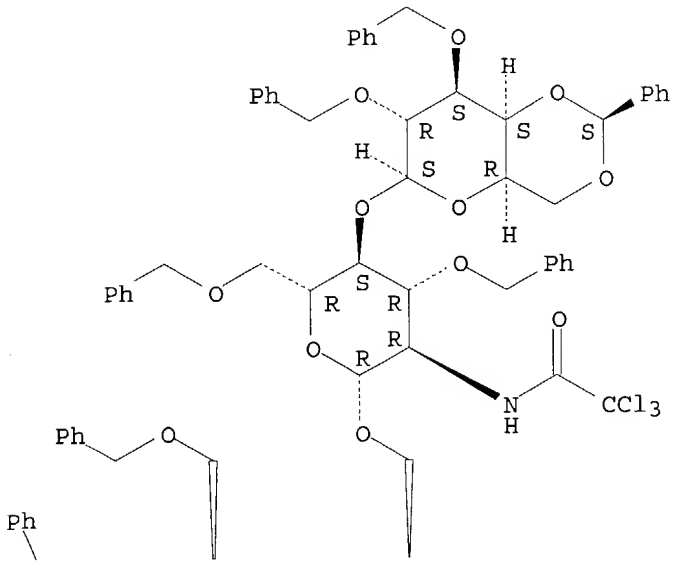
Absolute stereochemistry. Rotation (-).



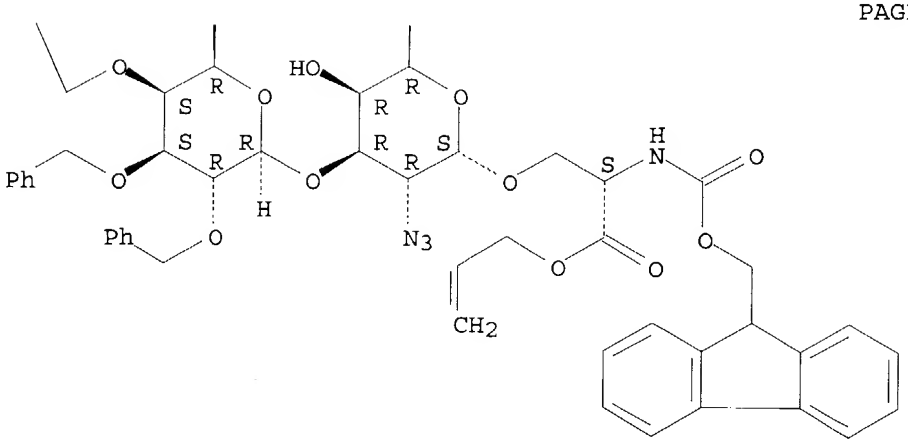
RN 503831-02-5 HCAPLUS
CN L-Serine, O-[O-2,3-bis-O-(phenylmethyl)-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→4)-O-2-deoxy-3,6-bis-O-(phenylmethyl)-2-[(trichloroacetyl)amino]-β-D-glucopyranosyl-(1→6)-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl-(1→3)]-2-azido-2-deoxy-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



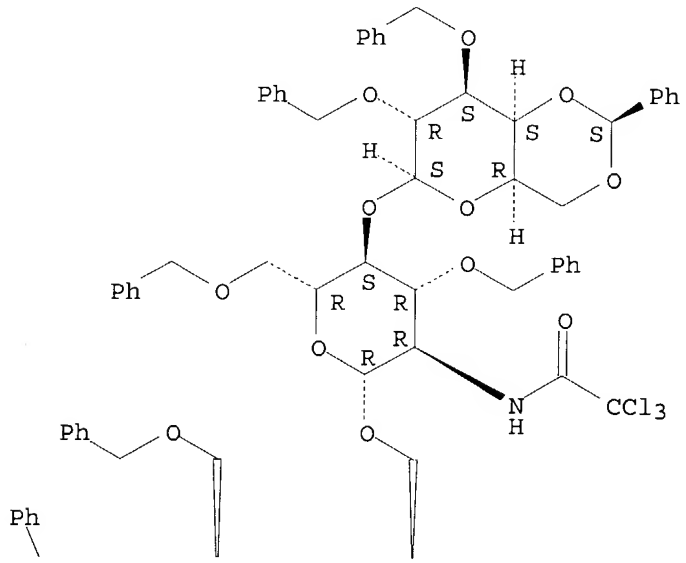
PAGE 2-A



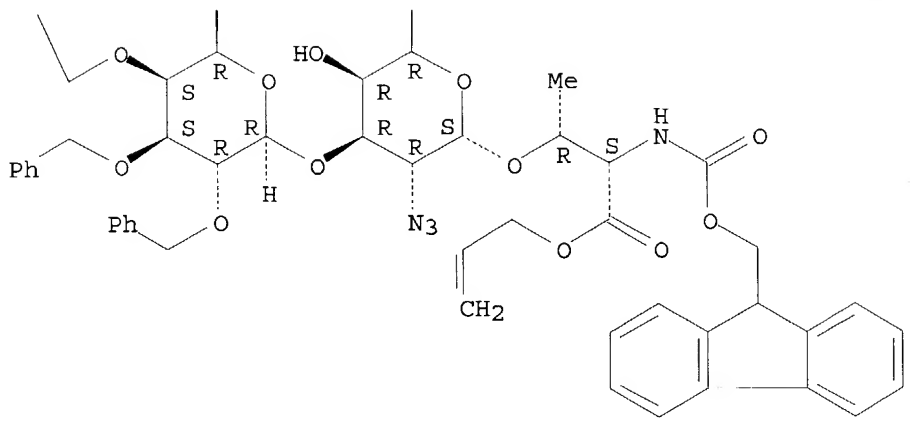
RN 503831-03-6 HCAPLUS
CN L-Threonine, O-[O-2,3-bis-O-(phenylmethyl)-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→4)-O-2-deoxy-3,6-bis-O-(phenylmethyl)-2-[(trichloroacetyl)amino]-β-D-glucopyranosyl-(1→6)-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-β-D-galactopyranosyl-(1→3)]-2-azido-2-deoxy-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 2-A

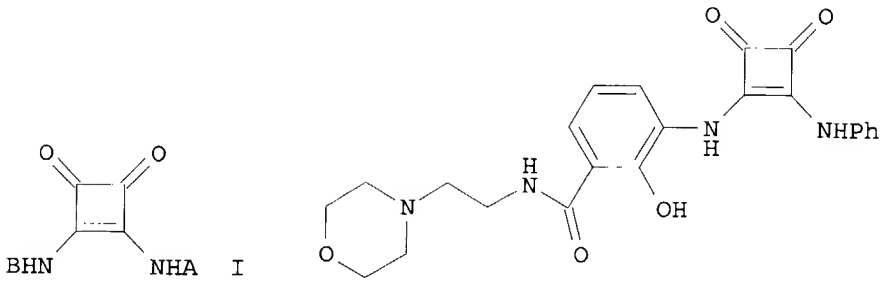


REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:754340 HCAPLUS
DOCUMENT NUMBER: 137:279205
TITLE: Preparation of 3,4-diaminocyclobutene-1,2-diones as CXC chemokine receptor antagonists
INVENTOR(S): Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Pachter, Jonathan; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Nelson, Kingsley H., Jr.; Rokosz, Laura L.
PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002076926	A1	20021003	WO 2002-US2888		20020201
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1355875	A1	20031029	EP 2002-731085		20020201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2002006968	A	20040309	BR 2002-6968		20020201
NO 2003003424	A	20030930	NO 2003-3424		20030731
PRIORITY APPLN. INFO.:			US 2001-265951P	P	20010202
			WO 2002-US2888	W	20020201

OTHER SOURCE(S): MARPAT 137:279205
GI



AB Title compds. I; [A = (substituted) aryl, heteroaryl; B = (substituted) Ph, benzotriazolyl, benzimidazolyl, hydroxyimidazolyl, hydroxythienyl, hydroxypyrrolyl, etc.], were prepared Thus, 1-ethoxy-2-phenylamino-1-cyclobutene-3,4-dione (preparation given) and 2-OH-3-[2-(morpholinoethyl)aminocarbonyl]aniline (preparation given) were refluxed overnight in EtOH to give 34% title compound (II). I showed CXCR2 receptor binding activity in the range of 1-10000 nM.

IC ICM C07C225-20
ICS C07C229-42; C07C229-64; C07C237-36; C07C237-44; C07C255-58; C07C255-59; C07C271-20; C07C311-08; C07C311-21; C07D205-04; C07D207-08; C07D207-16; C07D211-60; C07D213-89; C07D231-38; C07D235-06; C07D239-42; C07D249-18; C07D277-28

CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 25, 27

IT Anti-AIDS agents
Anti-Alzheimer's agents
Antiarthritics
Antiasthmatics
Anticoagulants
Antimalarials
Antitumor agents
Antiviral agents
Human
Solid phase synthesis
(preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

IT 50-35-1, Thalidomide 145-63-1, Suramin 15866-90-7, Col-3 33069-62-4, Taxol **37270-94-3**, Platelet factor 4 38101-59-6, Im862 86090-08-6, Angiostatin 99519-84-3, CAI 114977-28-5, Taxotere 129298-91-5, Tnp-470 148717-90-2, Squalamine 154039-60-8, Marimastat 169799-04-6, Cgs27023a 187888-07-9, Endostatin 188968-51-6, Emd121974 192329-42-3, Ag3340 204005-46-9, Su-5416 212142-18-2, PTK 787 216974-75-3 252916-29-3, Su-6668 259188-38-0, Bms-275291 305838-77-1, Neovastat 324740-00-3, Vitaxin 386211-13-8, Zd-101 443913-73-3, Zd-6474
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

IT **37270-94-3**, Platelet factor 4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coadministration; preparation of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
RN 37270-94-3 HCAPLUS
CN Blood platelet factor 4 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:623039 HCAPLUS
DOCUMENT NUMBER: 137:370285
TITLE: Recent developments in oligosaccharide synthesis: tactics, solid-phase synthesis and library synthesis
AUTHOR(S): Kanemitsu, T.; Kanie, O.
CORPORATE SOURCE: Biomolecular Science & Technology Department, Mitsubishi Kagaku Institute of Life Sciences (MITILS), Machida, 194-8511, Japan
SOURCE: Combinatorial Chemistry and High Throughput Screening (2002), 5(5), 339-360
CODEN: CCHSFU; ISSN: 1386-2073
PUBLISHER: Bentham Science Publishers
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB This review summarizes the necessary solution-phase methodologies, the status of solid-phase synthesis of oligosaccharides, and combinatorial synthesis of oligosaccharide libraries. Oligosaccharides, commonly found on the cell surfaces, are deeply involved in a variety of important biol. functions, yet demanding difficulties synthesizing such structures limit the investigation of their functions. Technologies to chemical synthesize these oligosaccharides have dramatically advanced during the last two decades mainly due to the introduction of good **anomeric** leaving groups. In addition, tactical analyses have been addressed to enhance the overall efficiency of oligosaccharide synthesis. Based on the advancement of solution-phase chemical, solid-phase technologies are being investigated in connection with the current trend of combinatorial chemical and high throughput screening.
CC 33-0 (Carbohydrates)
IT Combinatorial chemistry
Solid phase synthesis
(review on the solid-phase synthesis and library synthesis of oligosaccharides)
IT **Oligosaccharides, preparation**
RL: CPN (Combinatorial preparation); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation)
(review on the solid-phase synthesis and library synthesis of oligosaccharides)
REFERENCE COUNT: 168 THERE ARE 168 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

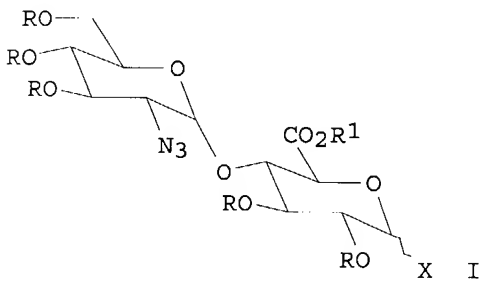
L20 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:574867 HCAPLUS
DOCUMENT NUMBER: 137:125357
TITLE: Solid- and solution-phase combinatorial libraries synthesis of heparin and other glycosaminoglycans as potential receptors
INVENTOR(S): Seeberger, Peter H.; Orgueira, Hernan; Schell, Peter
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA

SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058633	A2	20020801	WO 2002-US1772	20020122
WO 2002058633	A3	20021017		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003013862	A1	20030116	US 2002-54724	20020122
EP 1353556	A2	20031022	EP 2002-709129	20020122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2001-263621P P 20010123
WO 2002-US1772 W 20020122

OTHER SOURCE(S): MARPAT 137:125357
GI



I

AB Described is a modular, general synthetic strategy for the preparation in solution and on a solid support of heparin, heparin-like glycosaminoglycans, glycosaminoglycans and non-natural analogs, e.g. I, wherein X is OH, acyloxy, silyloxy, halide, alkylthio, arylthio, alkoxy, OC(NH)CCl3; R is H, alkyl, aryl, arylalkyl, heteroarylalkyl, silyl, acyl, alkenyloxycarbonyl, aralkyloxycarbonyl; R1 is H, alkyl, aryl, arylalkyl, heteroarylalkyl and derivs. Addnl., the modular strategy provides the basis for the preparation of combinatorial libraries and parallel libraries of defined glycosaminoglycan oligosaccharides. The defined glycosaminoglycan structures may be used in high-throughput screening expts. to identify carbohydrate sequences that regulate a host of recognition and signal-transduction processes. The determination of specific sequences involved in receptor binding holds great promise for the development of mol. tools which will allow modulation of processes underlying viral entry,

angiogenesis, kidney diseases and diseases of the control nervous system (no data). Notably, the present invention enables the automated synthesis of glycosaminoglycans in much the same fashion that peptides and oligonucleotides are currently assembled. Thus, n-pentenyl (2-deoxy-2-sodium sulfonatamido-3,4,6-tri-O-sodium sulfonato-α-D-glucopyranosyl)-(1→4)-(sodium 2-O-sodium sulfonato-α-D-idopyranosyluronate)-(1→4)-(2-deoxy-2-sodium sulfonatamido-6-O-sodium sulfonato-α-D-glucopyranosyl)-(1→4)-sodium 2-O-sodium sulfonato-β-D-glucopyranosiduronate was prepared as potential receptors.

IC ICM A61K

CC 33-8 (Carbohydrates)
Section cross-reference(s): 1, 3

IT Combinatorial library
Solid phase synthesis
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

IT **Oligosaccharides, preparation**
Receptors
RL: CPN (Combinatorial preparation); IMF (Industrial manufacture); SPN (Synthetic preparation); CMBI (Combinatorial study); PREP (Preparation)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

IT **80321-89-7P** 87326-73-6P 92955-17-4P **99049-65-7P**
120312-09-6P 138889-14-2P 138923-10-1P
154920-34-0P 154970-28-2P 385422-21-9P
385422-22-0P 444118-29-0P 444118-30-3P
444118-31-4P 444118-32-5P 444118-33-6P
444118-34-7P 444118-35-8P 444118-36-9P
444118-37-0P 444118-38-1P 444118-39-2P 444118-40-5P
444118-41-6P 444118-42-7P 444118-44-9P 444118-45-0P
444118-47-2P 444118-48-3P 444118-49-4P
444118-50-7P 444118-51-8P 444118-52-9P
444118-53-0P 444118-54-1P 444118-55-2P
444118-56-3P 444118-57-4P 444118-58-5P
444118-59-6P 444118-60-9P 444118-61-0P
444118-62-1P 444118-63-2P 444118-64-3P
444118-65-4P 444118-66-5P 444118-67-6P
444118-68-7P 444118-69-8P 444118-70-1P
444118-71-2P 444118-72-3P 444118-73-4P
444118-74-5P 444118-75-6P 444118-76-7P
444118-77-8P 444118-78-9P 444118-79-0P
444118-81-4P 444118-82-5P 444118-83-6P
444118-84-7P 444118-85-8P 444118-87-0P
444118-88-1P 444118-89-2P 444118-90-5P
444118-91-6P 444118-94-9P 444118-99-4P
444119-00-0P 444119-01-1P 444119-02-2P
444119-03-3P 444119-04-4P 444119-05-5P
444119-06-6P 444119-07-7P 444119-08-8P 444119-09-9P
444119-10-2P 444119-11-3P **444119-12-4P 444119-13-5P**
444119-14-6P 444119-15-7P **444119-22-6P**
444119-23-7P 444119-41-9P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

IT 87326-76-9P 444118-43-8P 444118-46-1P **444118-80-3P**
444118-86-9P 444118-92-7P 444118-93-8P
444118-95-0P **444118-96-1P 444118-97-2P**

444118-98-3P 444119-16-8P 444119-17-9P
444119-18-0P 444119-19-1P 444119-20-4P
444119-21-5P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

IT 56-40-6, Glycine, reactions 66-84-2, Glucosamine hydrochloride
582-52-5 **171032-74-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

IT **80321-89-7P 99049-65-7P 120312-09-6P**
138889-14-2P 138923-10-1P 154920-34-0P
154970-28-2P 385422-21-9P 385422-22-0P
444118-29-0P 444118-30-3P 444118-31-4P
444118-32-5P 444118-33-6P 444118-34-7P
444118-35-8P 444118-36-9P 444118-37-0P
444118-38-1P 444118-47-2P 444118-48-3P
444118-49-4P 444118-50-7P 444118-51-8P
444118-52-9P 444118-53-0P 444118-54-1P
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444118-83-6P 444118-84-7P 444118-85-8P
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444118-91-6P 444118-94-9P 444118-99-4P
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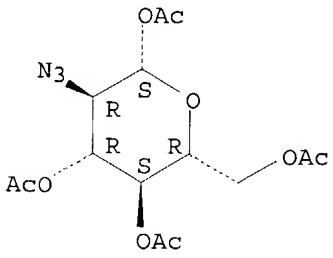
444119-03-3P 444119-04-4P 444119-05-5P
444119-06-6P 444119-07-7P 444119-12-4P
444119-13-5P 444119-14-6P 444119-22-6P
444119-23-7P 444119-41-9P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

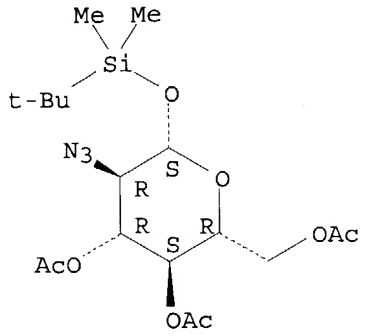
RN 80321-89-7 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-, 1,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



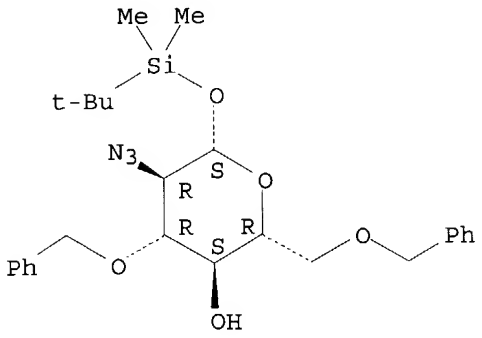
RN 99049-65-7 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



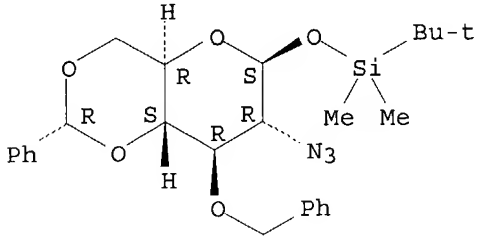
RN 120312-09-6 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



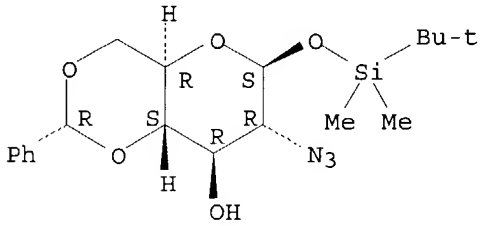
RN 138889-14-2 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-4,6-O-[(R)-phenylmethylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



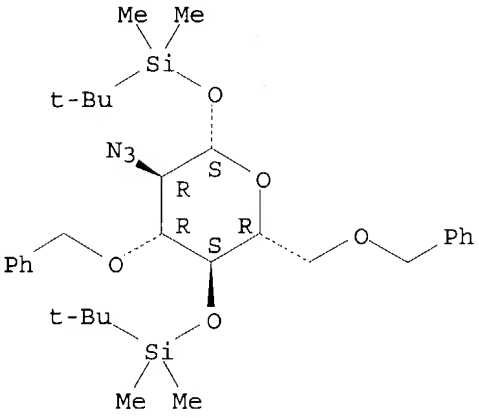
RN 138923-10-1 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-4,6-O-[(R)-phenylmethylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



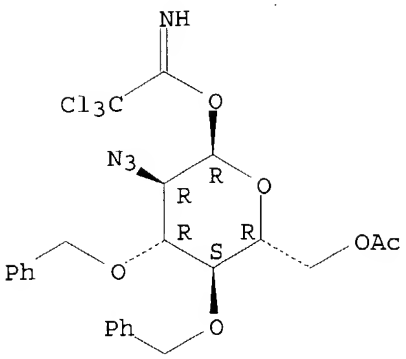
RN 154920-34-0 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1,4-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



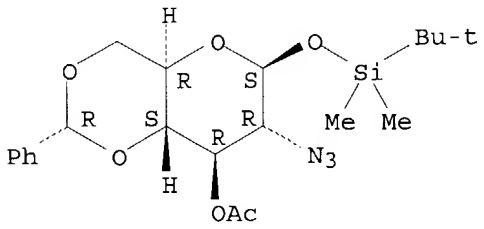
RN 154970-28-2 HCAPLUS
CN α-D-Glucopyranose, 2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-, 6-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



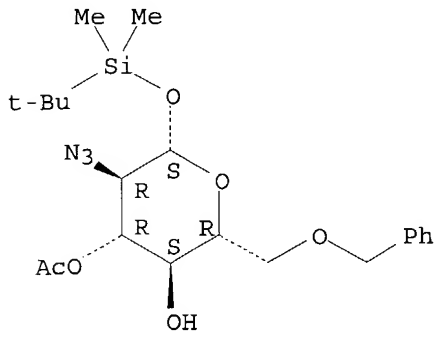
RN 385422-21-9 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-4,6-O-[(R)-phenylmethylene]-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



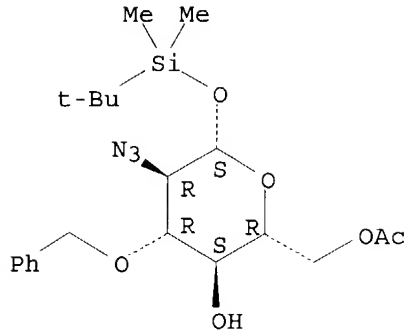
RN 385422-22-0 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-6-O-(phenylmethyl)-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



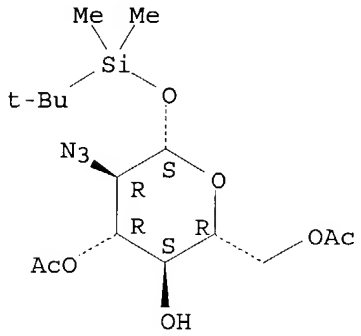
RN 444118-29-0 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



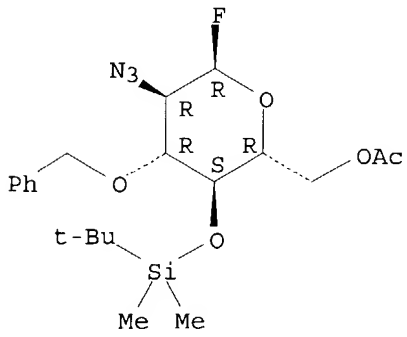
RN 444118-30-3 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 444118-31-4 HCAPLUS
CN α-D-Glucopyranosyl fluoride, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate (9CI) (CA INDEX NAME)

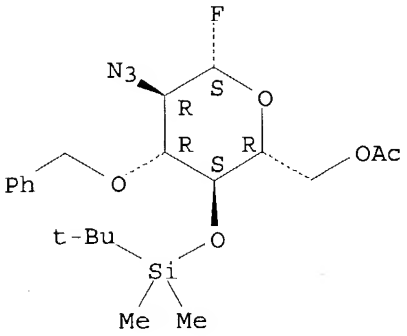
Absolute stereochemistry.



RN 444118-32-5 HCAPLUS
CN β-D-Glucopyranosyl fluoride, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate (9CI) (CA

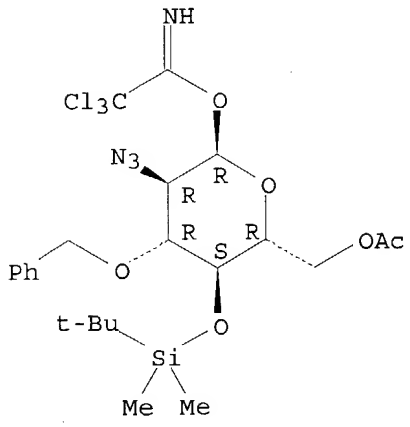
INDEX NAME)

Absolute stereochemistry.



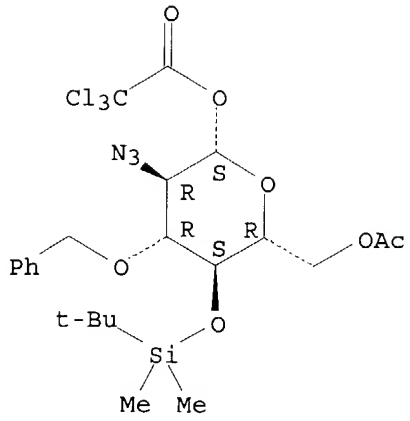
RN 444118-33-6 HCAPLUS
CN α-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



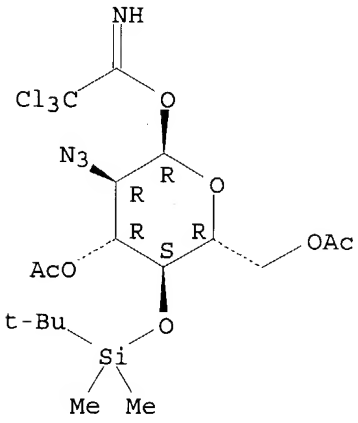
RN 444118-34-7 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate 1-(trichloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



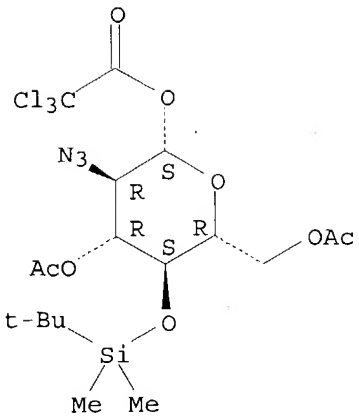
RN 444118-35-8 HCAPLUS
CN α-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



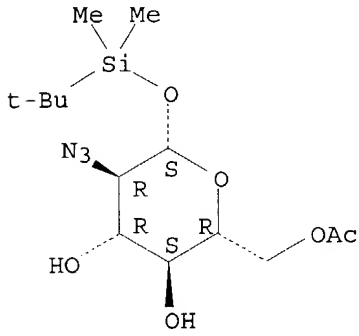
RN 444118-36-9 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate 1-(trichloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



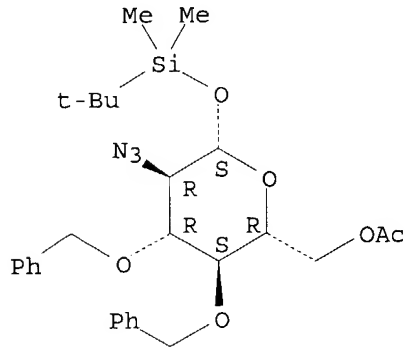
RN 444118-37-0 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-, 6-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



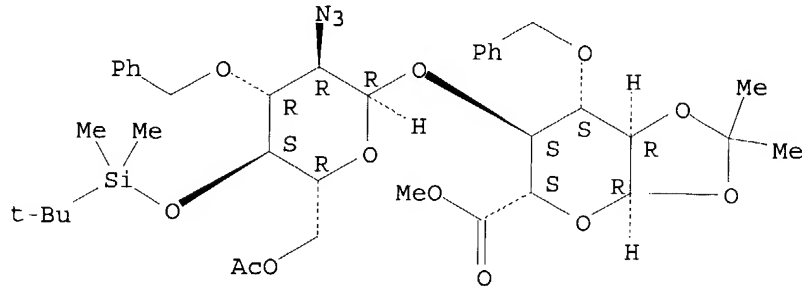
RN 444118-38-1 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3,4-bis-O-(phenylmethyl)-, 6-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



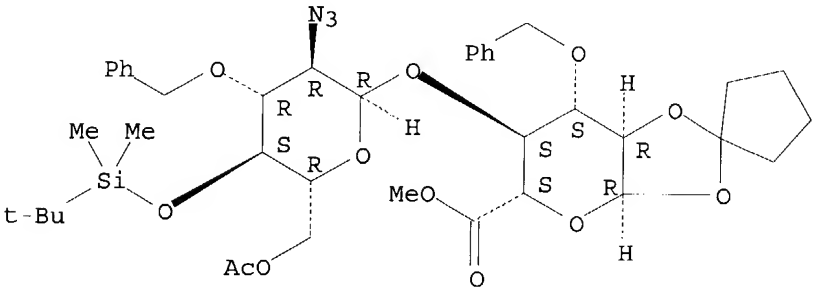
RN 444118-47-2 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



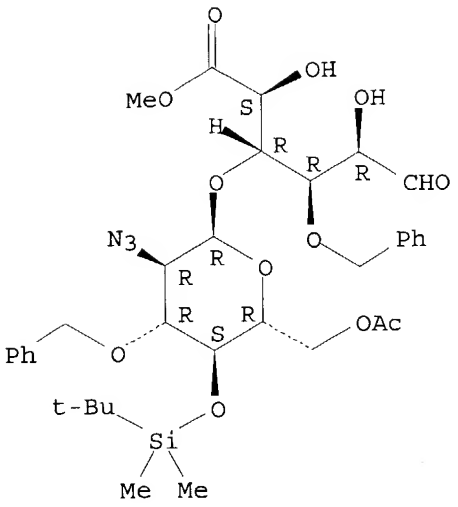
RN 444118-48-3 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-cyclopentylidene-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



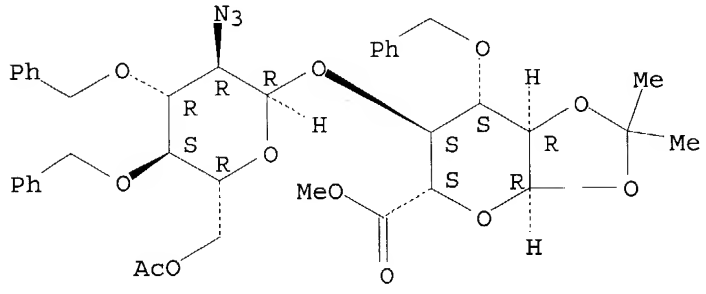
RN 444118-49-4 HCAPLUS
CN D-Glucuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



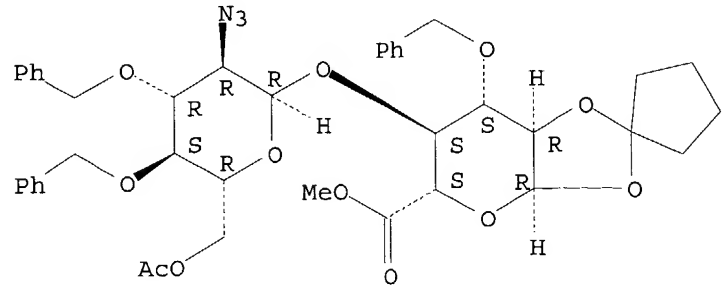
RN 444118-50-7 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 444118-51-8 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-cyclopentylidene-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

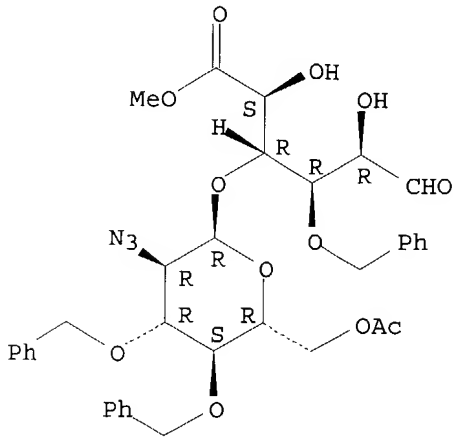
Absolute stereochemistry. Rotation (+).



RN 444118-52-9 HCAPLUS

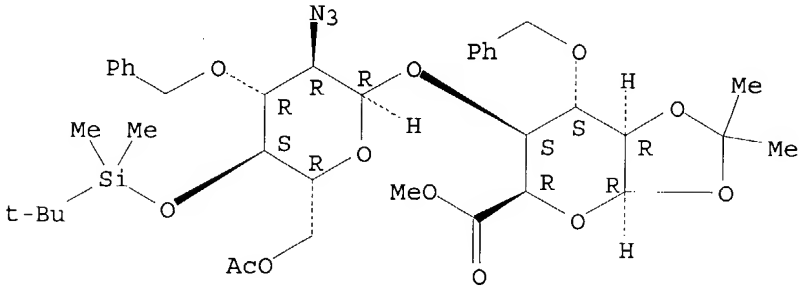
CN D-Glucuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



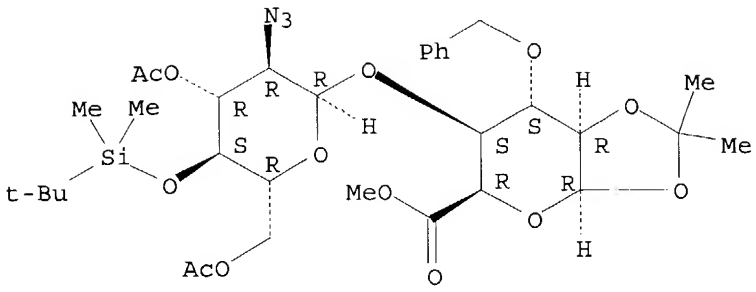
RN 444118-53-0 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



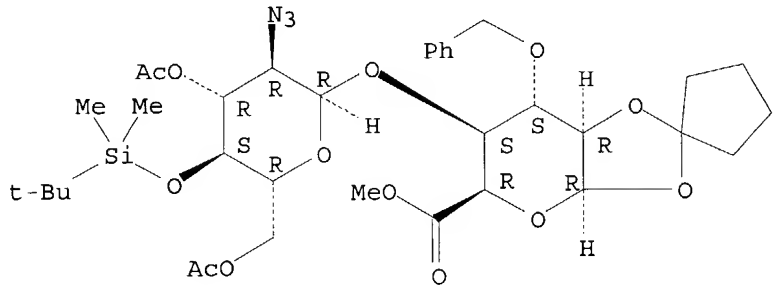
RN 444118-54-1 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



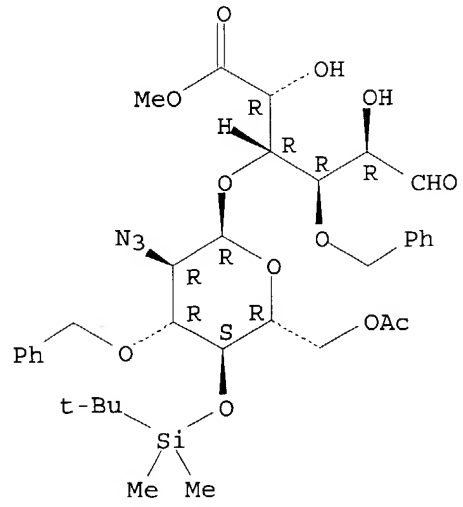
RN 444118-55-2 HCAPLUS
CN β-L-Idopyranuronic acid, 1,2-O-cyclopentylidene-4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 444118-56-3 HCAPLUS
CN L-Iduronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

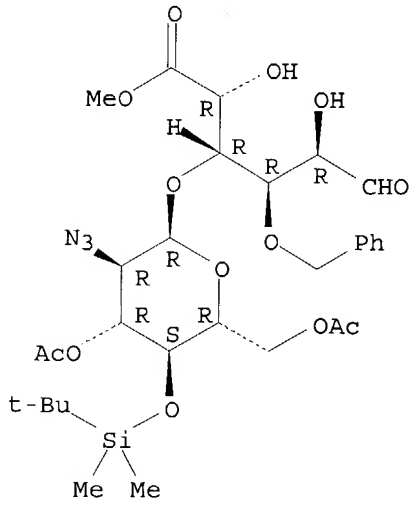
Absolute stereochemistry.



RN 444118-57-4 HCAPLUS

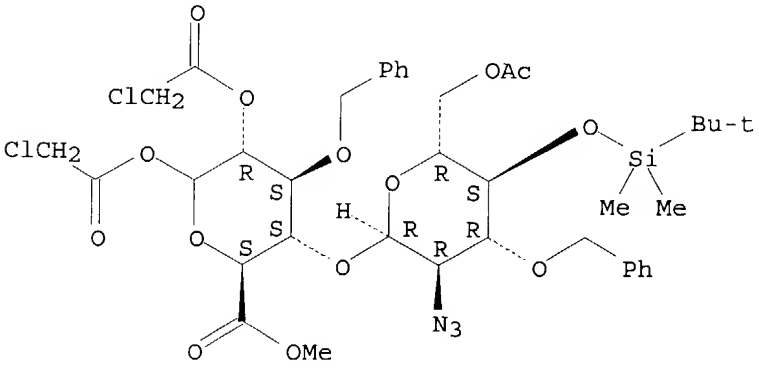
CN L-Iduronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



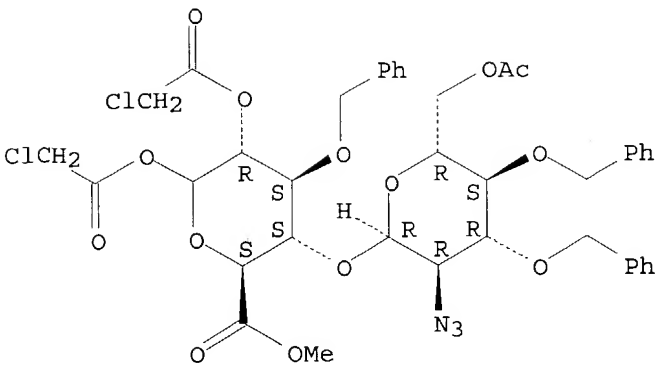
RN 444118-58-5 HCAPLUS
CN D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 1,2-bis(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



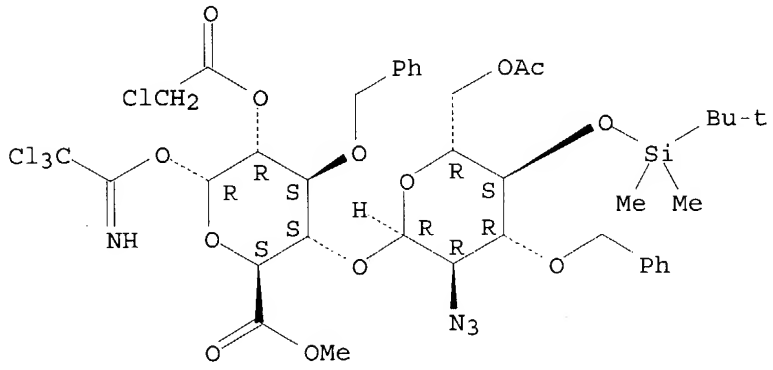
RN 444118-59-6 HCAPLUS
CN D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 1,2-bis(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



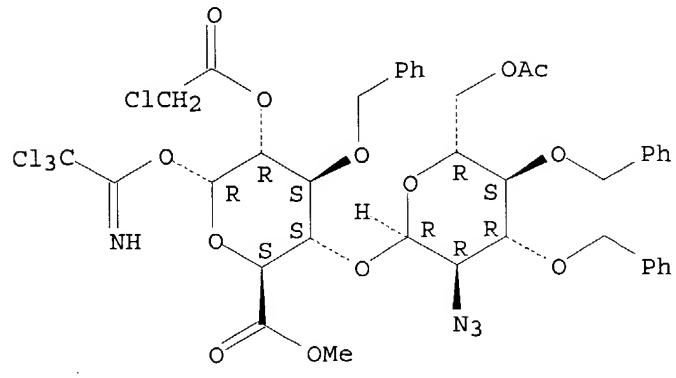
RN 444118-60-9 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



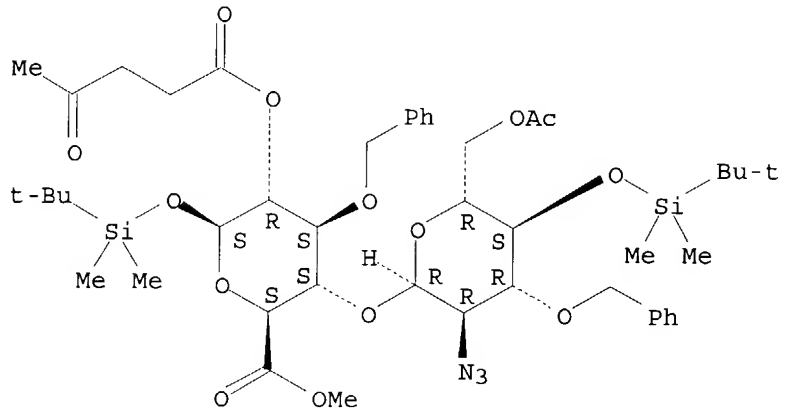
RN 444118-61-0 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



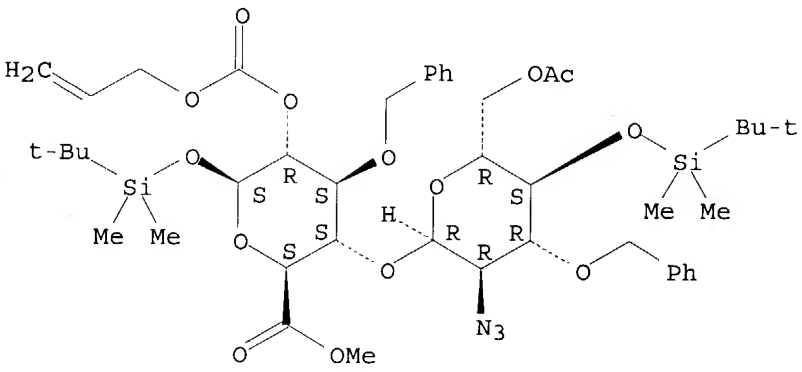
RN 444118-62-1 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



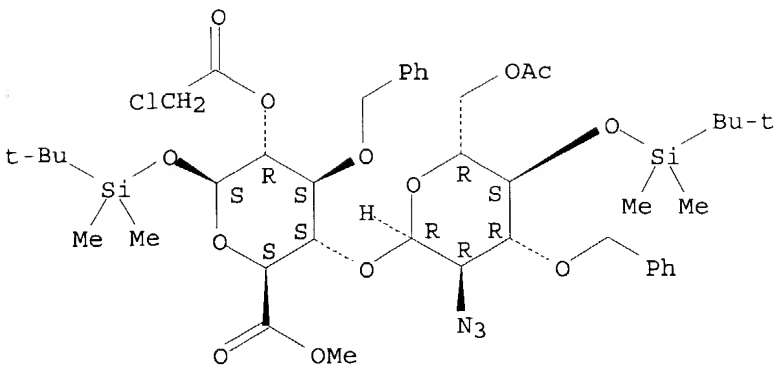
RN 444118-63-2 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



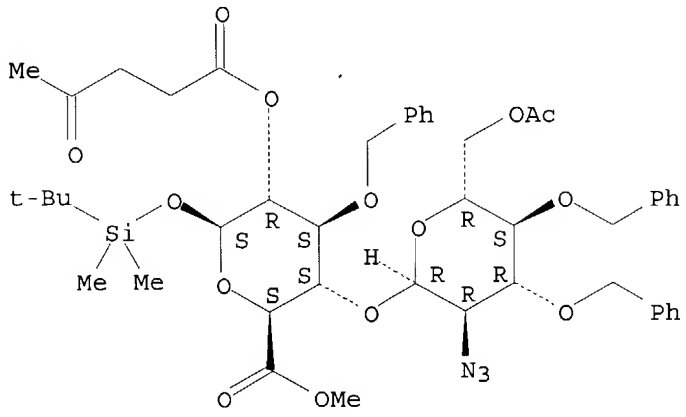
RN 444118-64-3 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



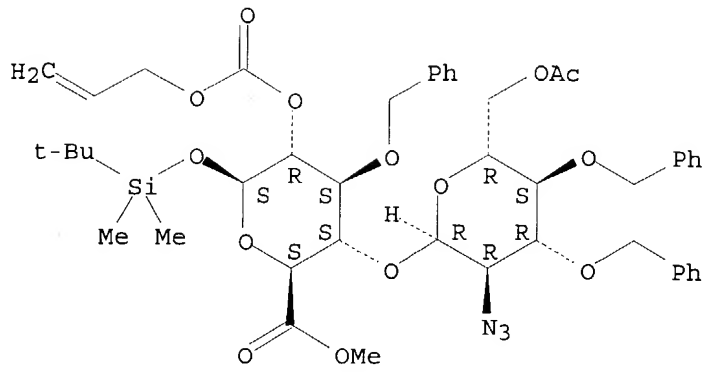
RN 444118-65-4 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



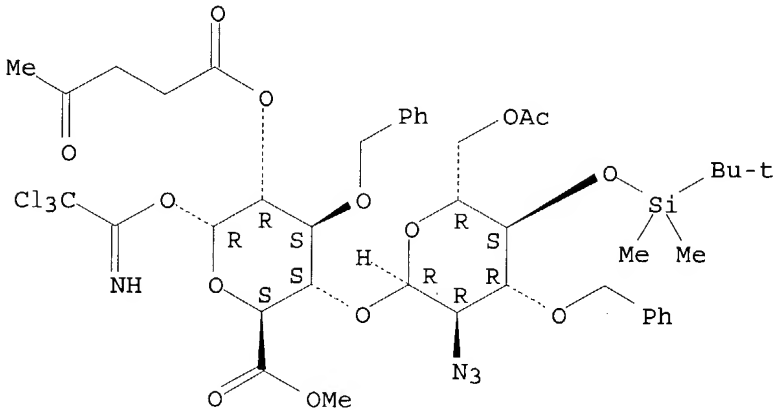
RN 444118-66-5 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



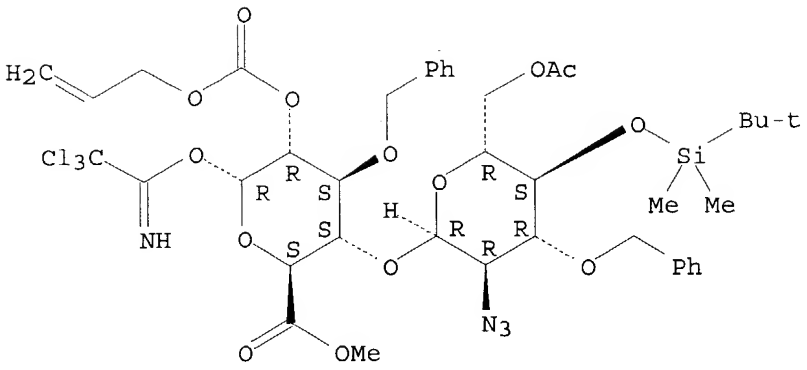
RN 444118-67-6 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



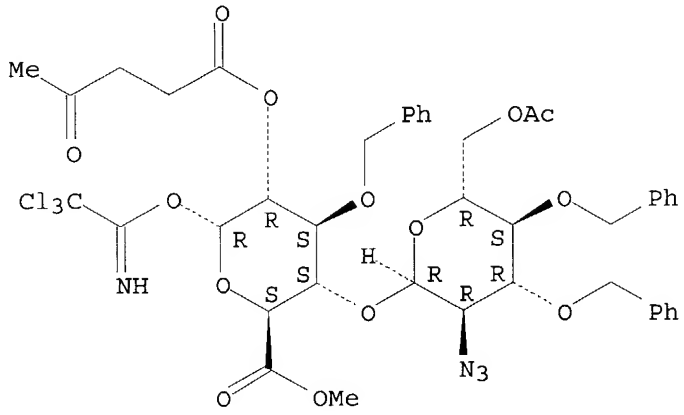
RN 444118-68-7 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



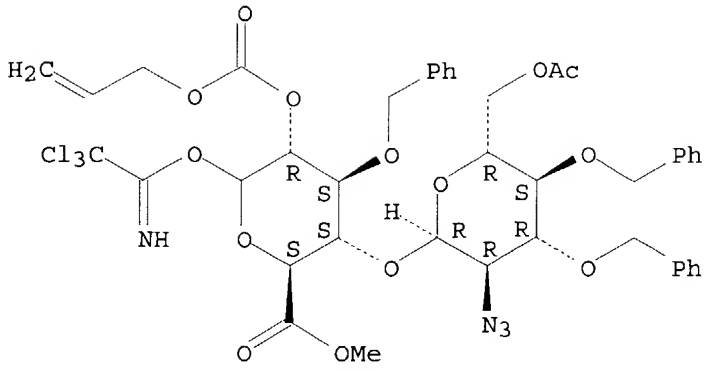
RN 444118-69-8 HCAPLUS
CN α-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



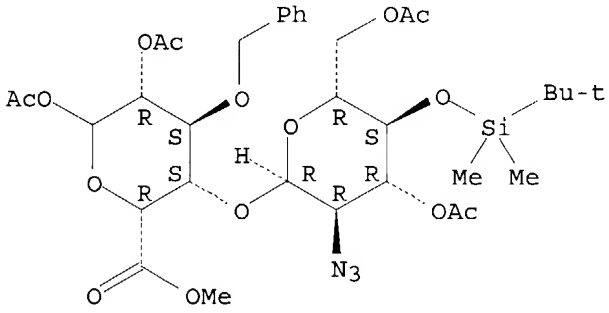
RN 444118-70-1 HCAPLUS
CN D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



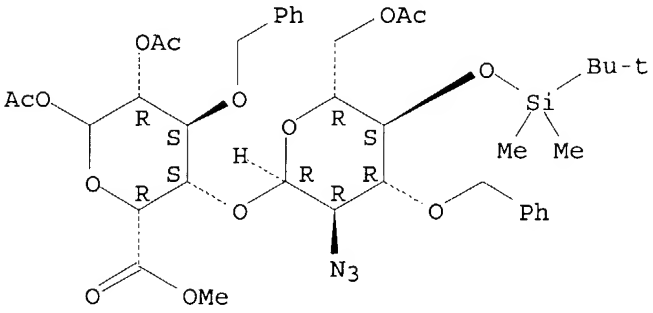
RN 444118-71-2 HCAPLUS
CN L-Idopyranuronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 1,2-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444118-72-3 HCAPLUS
CN L-Idopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 1,2-diacetate (9CI) (CA INDEX NAME)

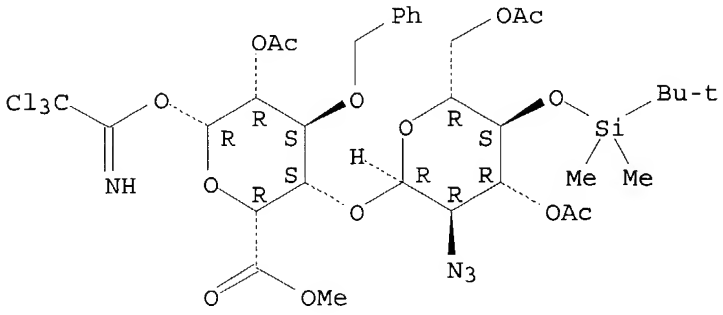
Absolute stereochemistry.



RN 444118-73-4 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate)

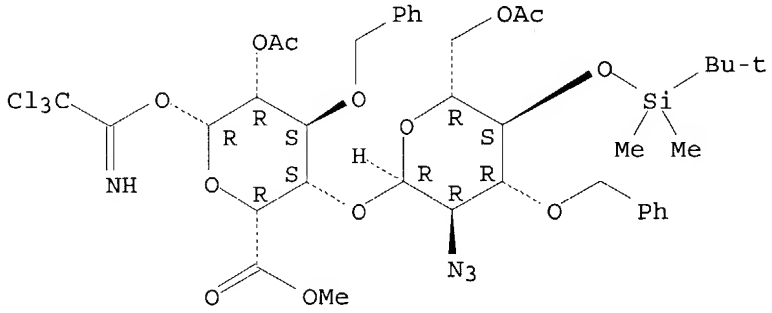
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



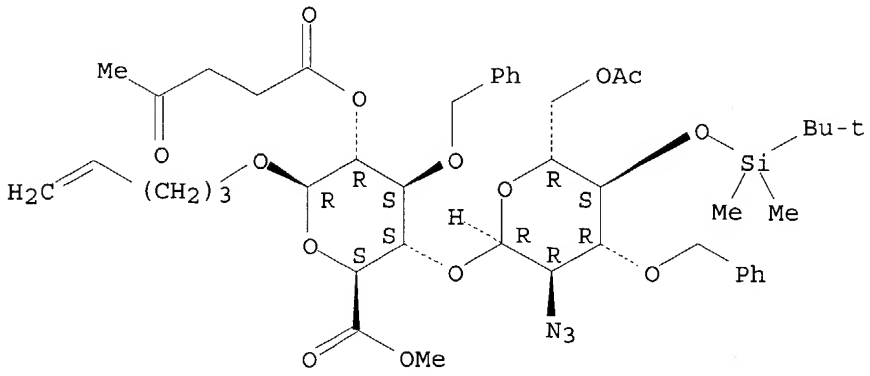
RN 444118-74-5 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



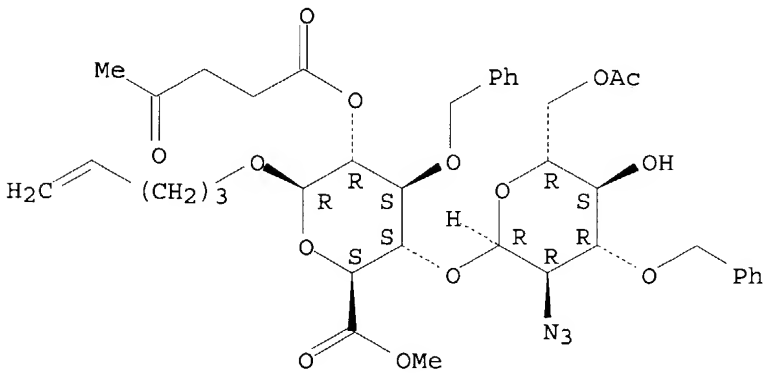
RN 444118-75-6 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



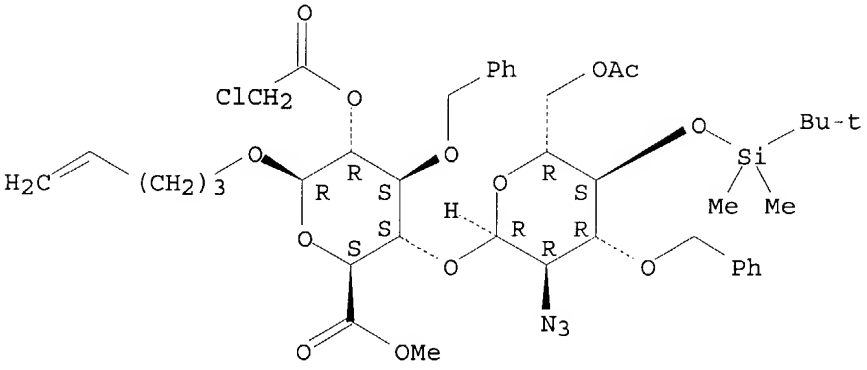
RN 444118-76-7 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



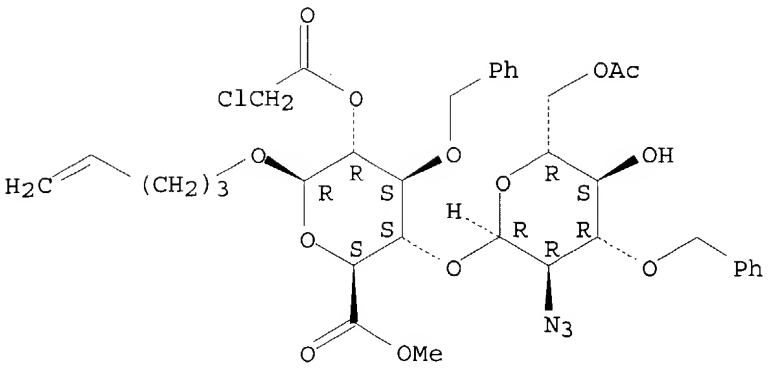
RN 444118-77-8 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



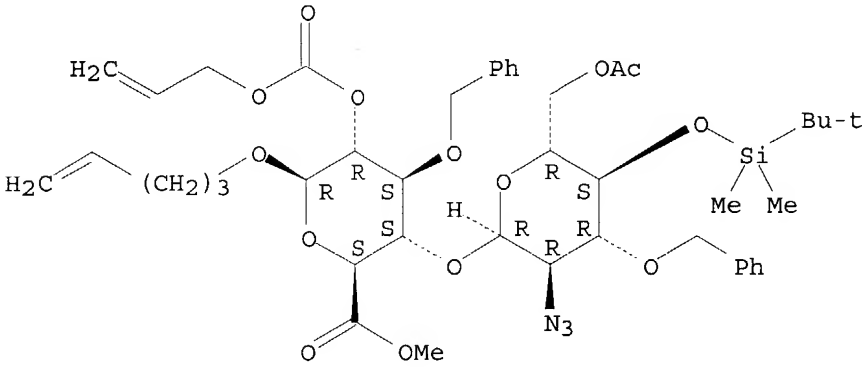
RN 444118-78-9 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 444118-79-0 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 444118-81-4 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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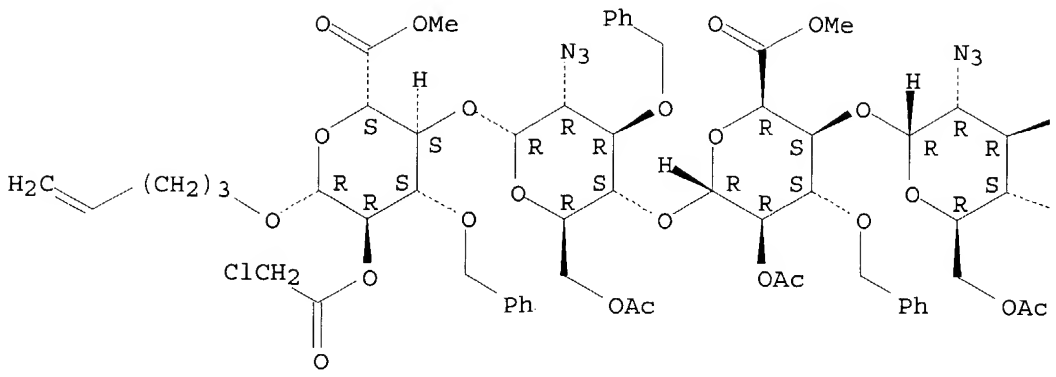

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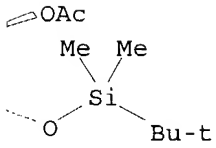

RN 444118-82-5 HCAPLUS

CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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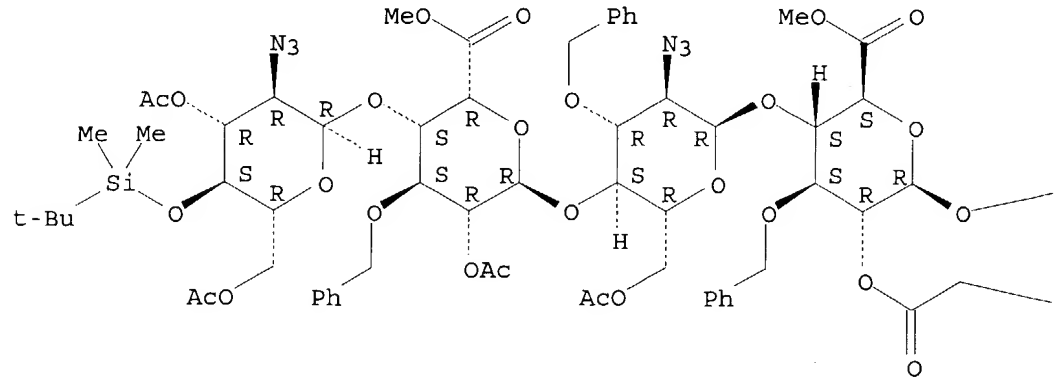

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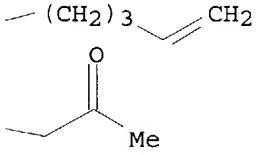

RN 444118-83-6 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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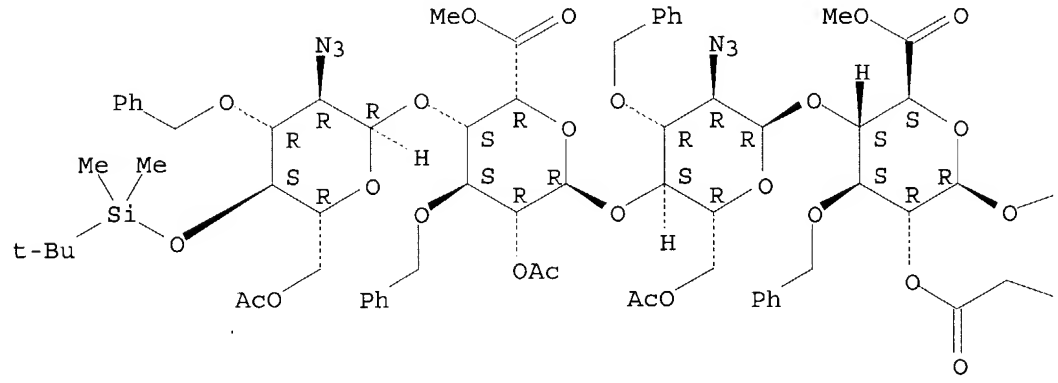

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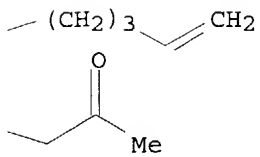

RN 444118-84-7 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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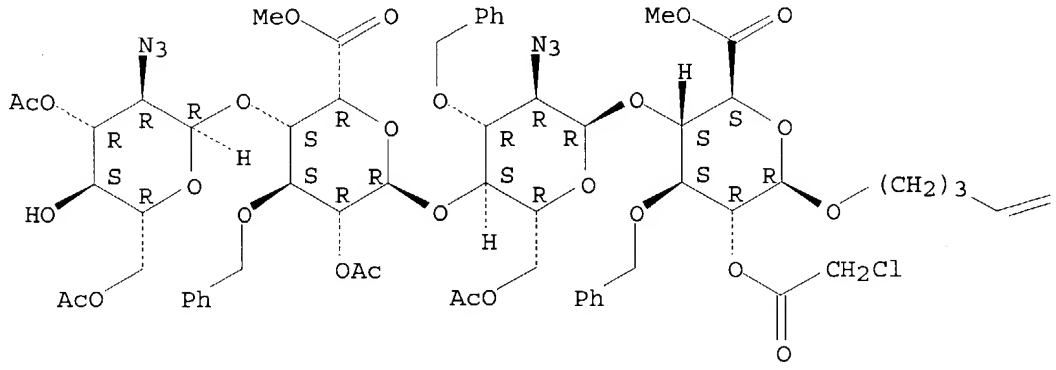

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RN 444118-85-8 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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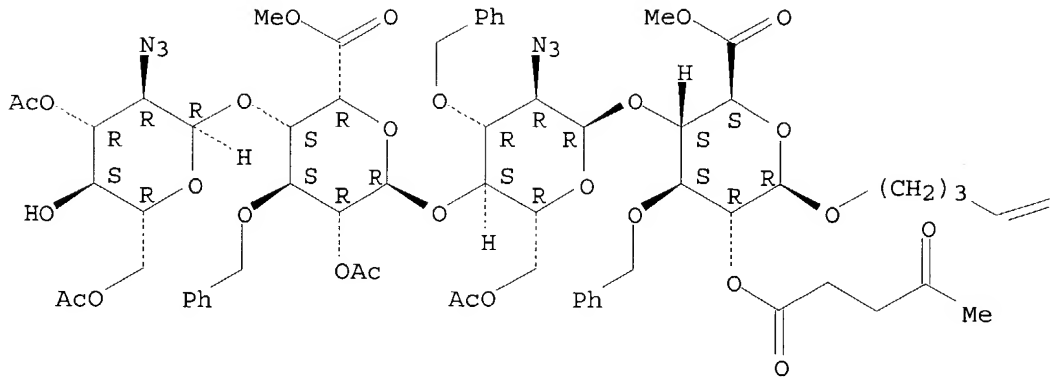

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RN 444118-88-1 HCAPLUS

CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-2-O-acetyl-4-O-[(1,1-dimethylethyl)dimethylsilyl]-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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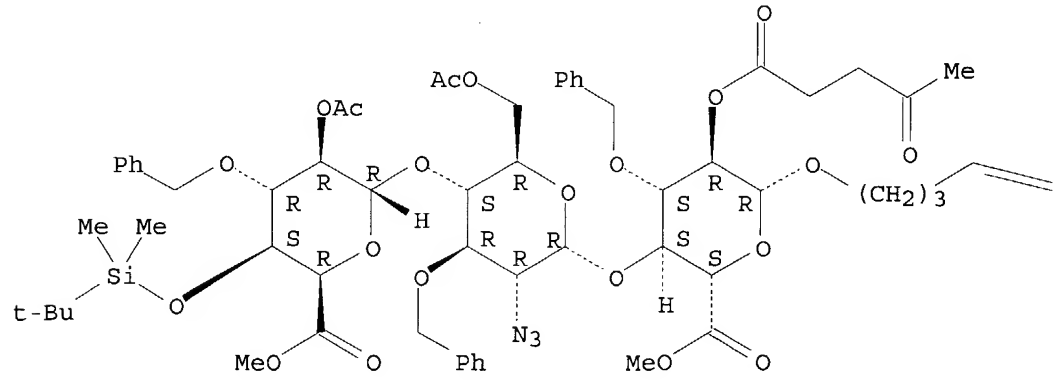
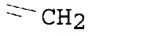
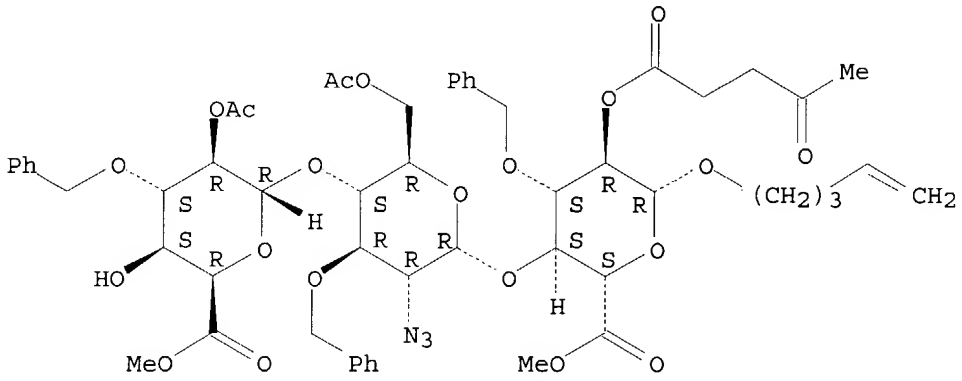




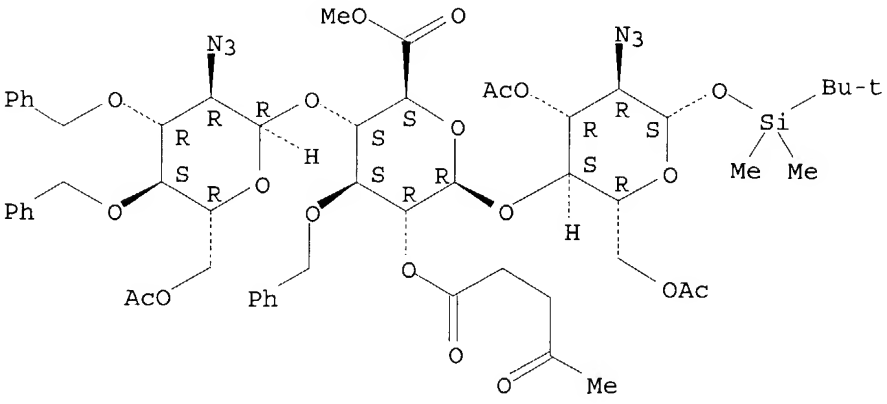
RN 444118-89-2 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



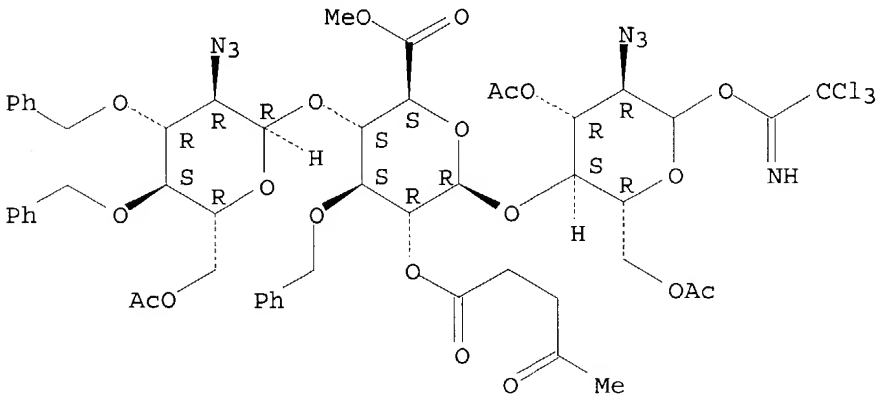
RN 444118-90-5 HCAPLUS
CN β-D-Glucopyranose, O-6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(1,4-dioxopentyl)-6-methyl-3-O-(phenylmethyl)-β-D-glucopyranuronosyl-(1→4)-2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444118-91-6 HCAPLUS
CN D-Glucopyranose, O-6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(1,4-dioxopentyl)-6-methyl-3-O-(phenylmethyl)-β-D-glucopyranuronosyl-(1→4)-2-azido-2-deoxy-, 3,6-diacetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444118-94-9 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,4,6-tri-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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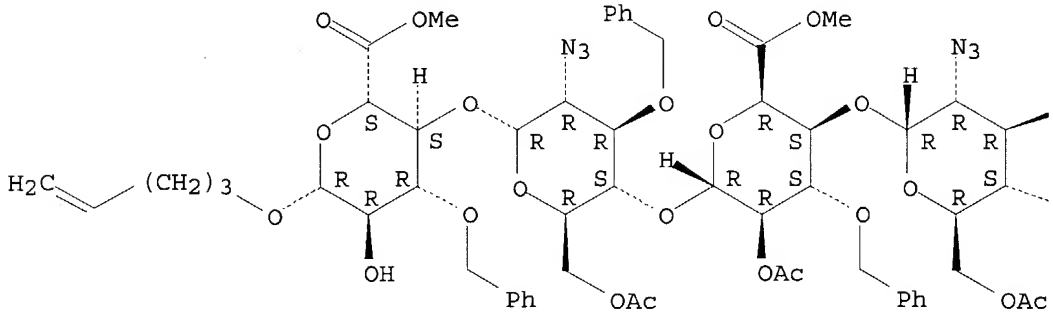

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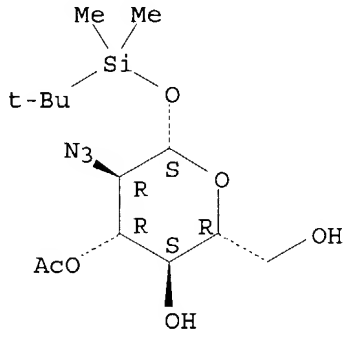
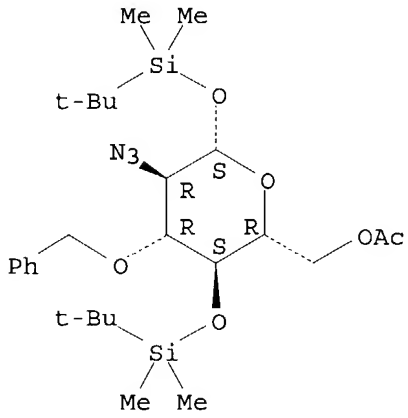
RN 444118-99-4 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



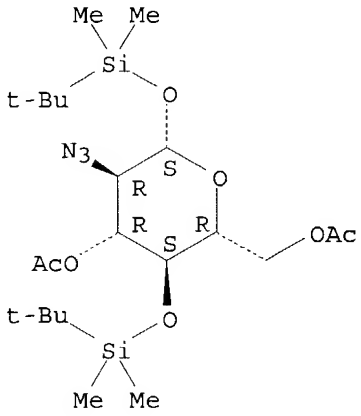
RN 444119-00-0 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1,4-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, 6-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



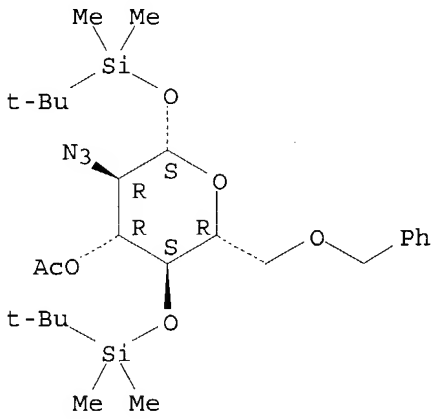
RN 444119-01-1 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1,4-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



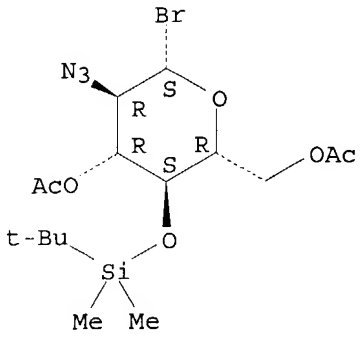
RN 444119-02-2 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-1,4-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-6-O-(phenylmethyl)-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



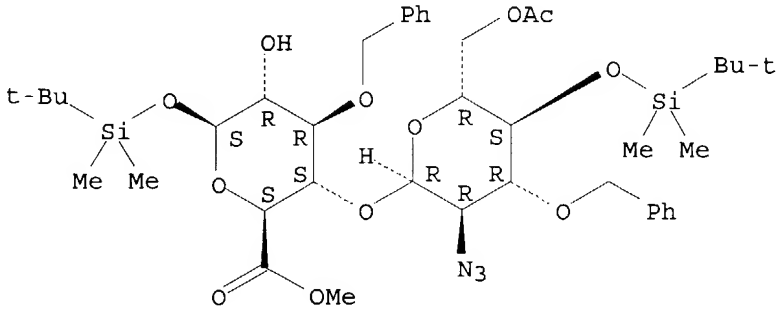
RN 444119-03-3 HCAPLUS
CN β-D-Glucopyranosyl bromide, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



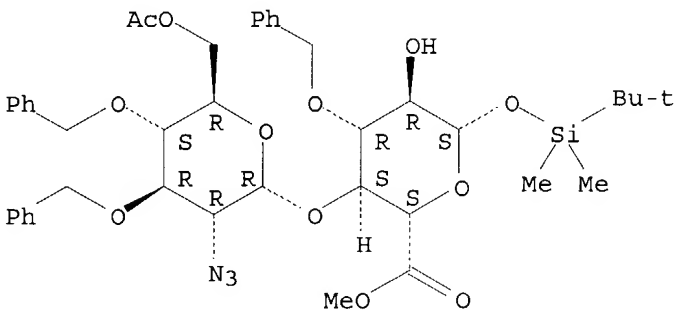
RN 444119-04-4 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



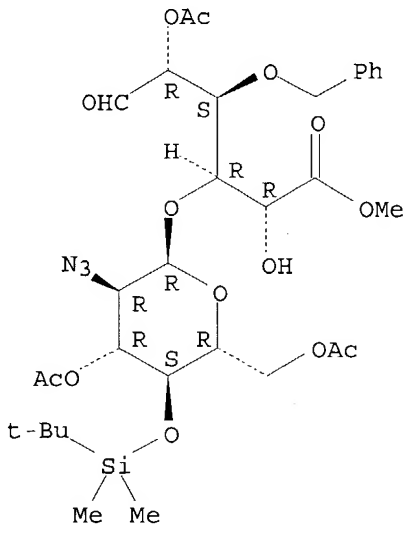
RN 444119-05-5 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-1-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



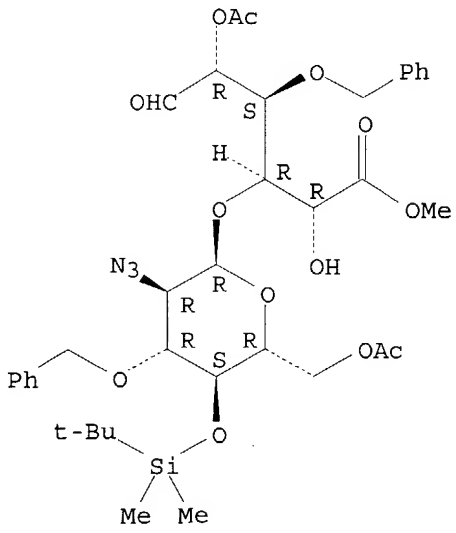
RN 444119-06-6 HCAPLUS
CN L-Iduronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444119-07-7 HCAPLUS
CN L-Iduronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate (9CI) (CA INDEX NAME)

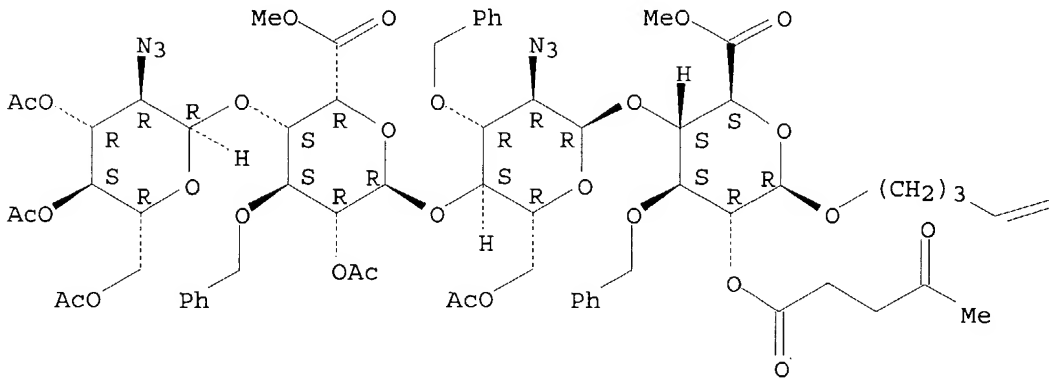
Absolute stereochemistry.



RN 444119-12-4 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,4,6-tri-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

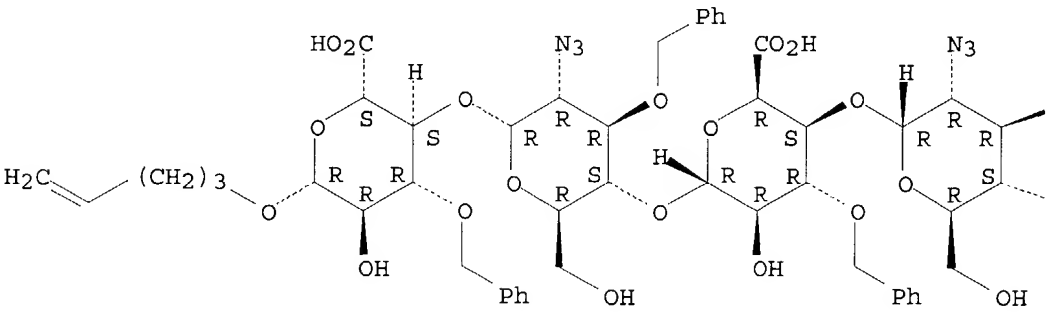


PAGE 1-B

RN 444119-13-5 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

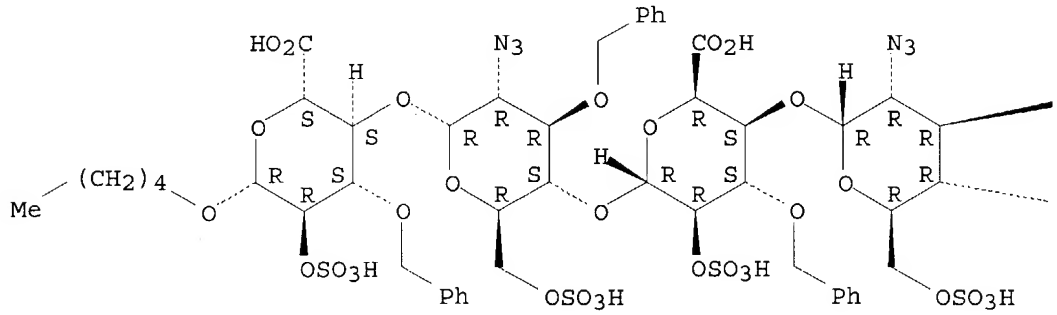
OH

OH

RN 444119-14-6 HCAPLUS
CN β-D-Glucopyranosiduronic acid, pentyl O-2-azido-2-deoxy-3,4,6-tri-O-sulfo-α-D-glucopyranosyl-(1→4)-O-3-O-(phenylmethyl)-2-O-sulfo-α-L-idopyranuronosyl-(1→4)-O-2-azido-2-deoxy-3-O-(phenylmethyl)-6-O-sulfo-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, 2-(hydrogen sulfate), octasodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

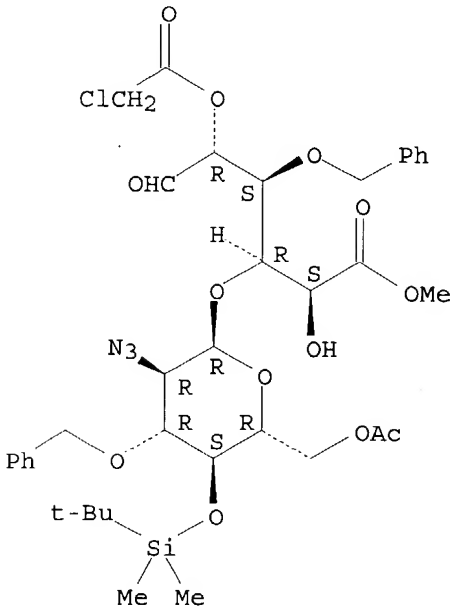
OSO3H

OSO3H

RN 444119-22-6 HCAPLUS
CN D-Glucuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX

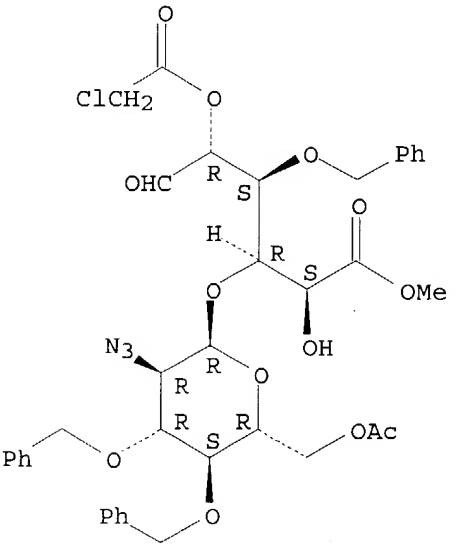
NAME)

Absolute stereochemistry.



RN 444119-23-7 HCAPLUS
CN D-Glucuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(chloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444119-41-9 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-

deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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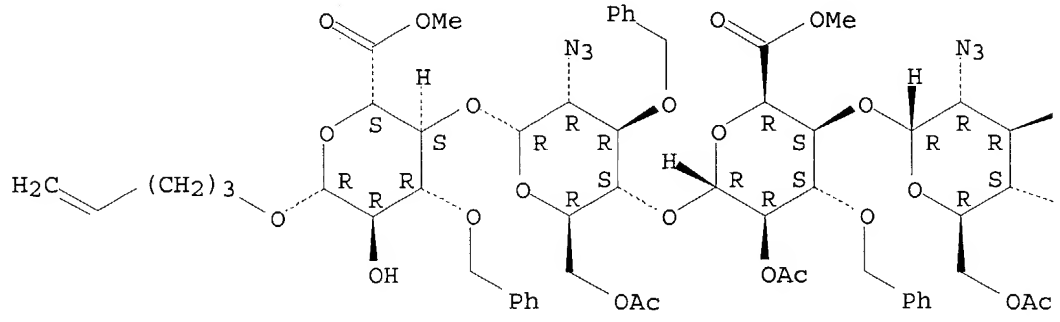


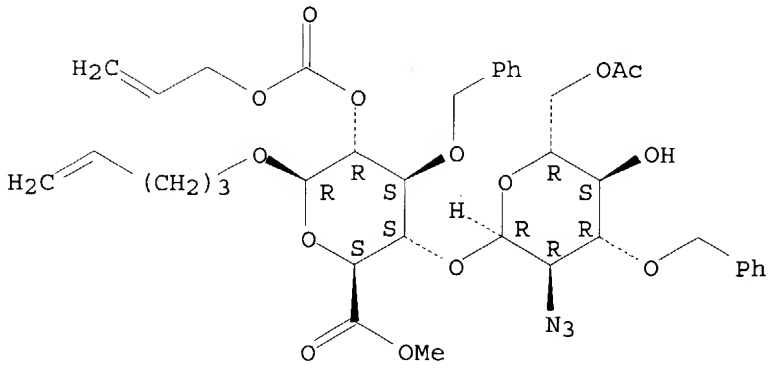
PAGE 1-B

IT **444118-80-3P 444118-86-9P 444118-92-7P**
444118-93-8P 444118-96-1P 444118-97-2P
444118-98-3P 444119-16-8P 444119-17-9P
444119-18-0P 444119-19-1P 444119-20-4P
444119-21-5P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)

RN 444118-80-3 HCAPLUS

CN β-D-Glucopyranosiduronic acid, 4-pentenyl 4-O-[6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-(2-propenyl carbonate) (9CI) (CA INDEX NAME)

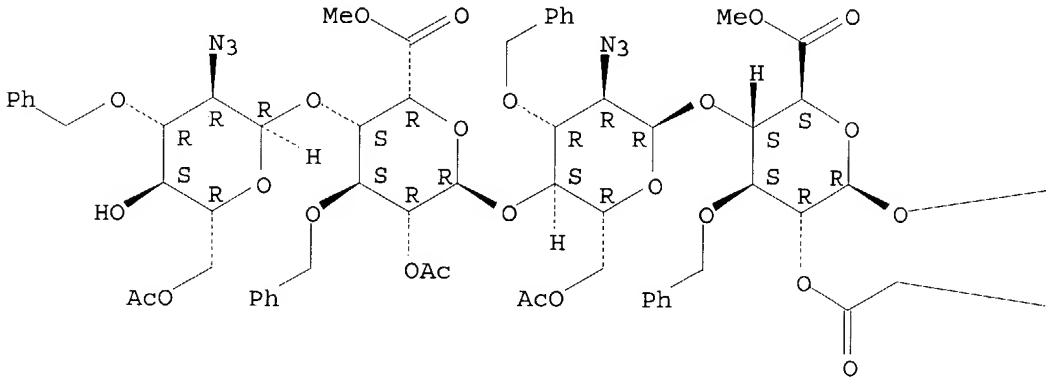
Absolute stereochemistry. Rotation (+).



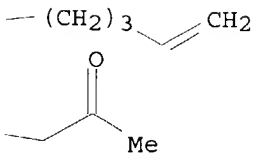
RN 444118-86-9 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



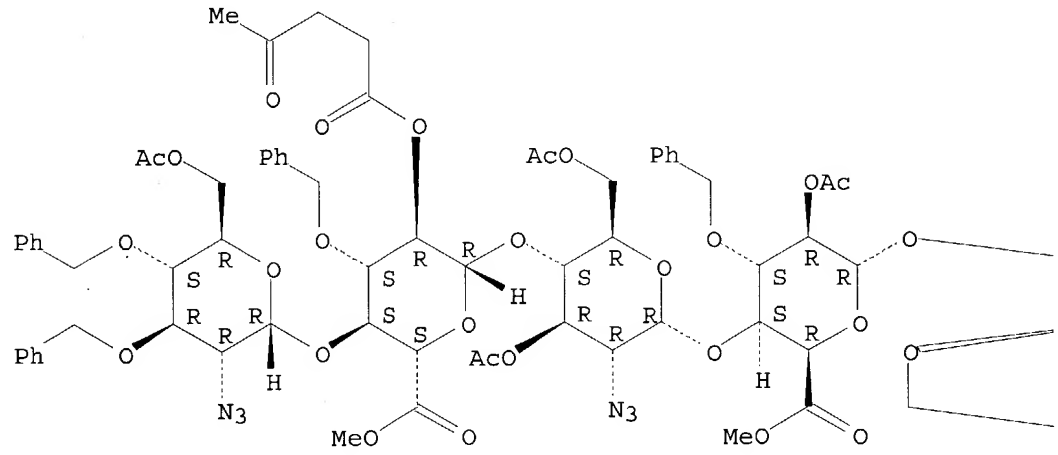
PAGE 1-B



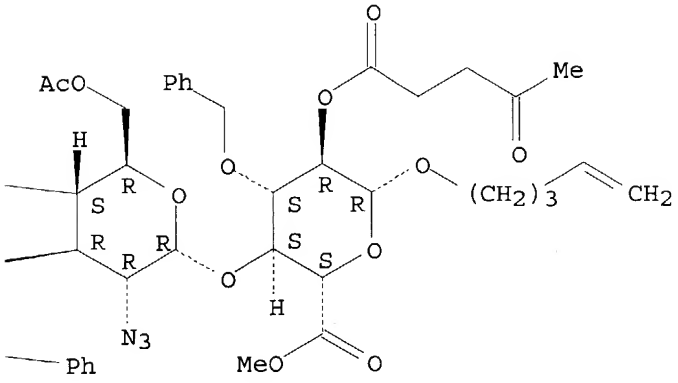
RN 444118-92-7 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-6-O-acetyl-2-azido-2-deoxy-3,4-bis-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-O-2-O-(1,4-dioxopentyl)-6-methyl-3-O-(phenylmethyl)-β-D-glucopyranuronosyl-(1→4)-O-3,6-di-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-3-O-(phenylmethyl)-, methyl ester, 2-(4-oxopentanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 1-B

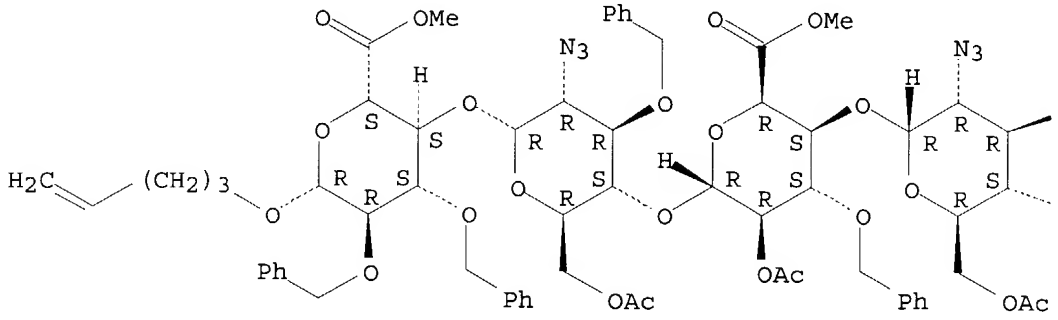


RN 444118-93-8 HCAPLUS
CN β-D-Glucopyranosiduronic acid, 4-pentenyl O-3,6-di-O-acetyl-2-azido-2-deoxy-α-D-glucopyranosyl-(1→4)-O-2-O-acetyl-6-methyl-3-O-(phenylmethyl)-α-L-idopyranuronosyl-(1→4)-O-6-O-acetyl-2-

azido-2-deoxy-3-O-(phenylmethyl)-α-D-glucopyranosyl-(1→4)-2,3-bis-O-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



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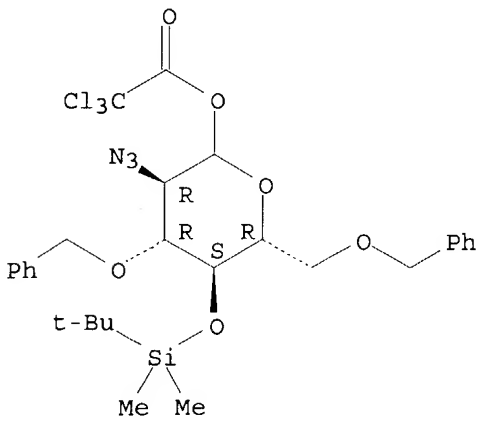
RN 444118-96-1 HCAPLUS
CN D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-, 1-(trichloroacetate) (9CI) (CA INDEX NAME)

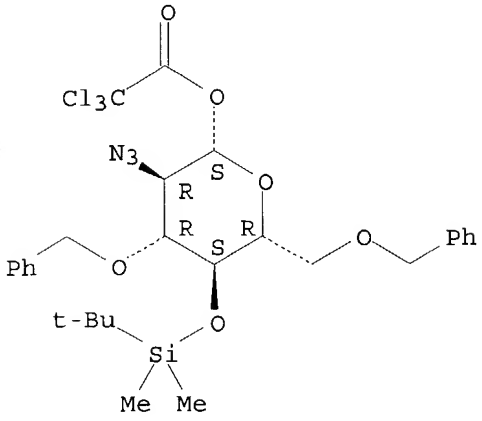
Absolute stereochemistry.



RN 444118-97-2 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-,

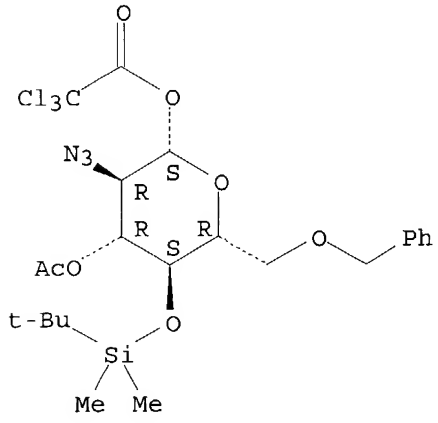
1-(trichloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



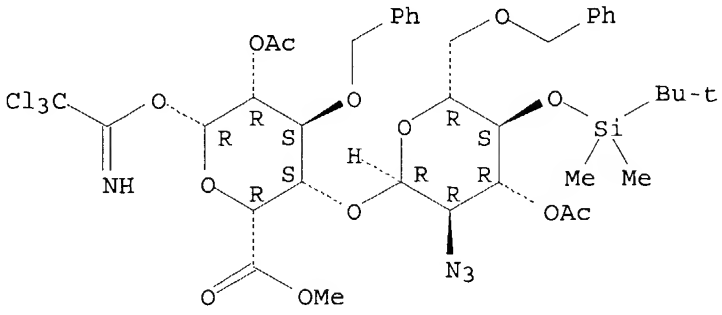
RN 444118-98-3 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-6-O-(phenylmethyl)-, 3-acetate 1-(trichloroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



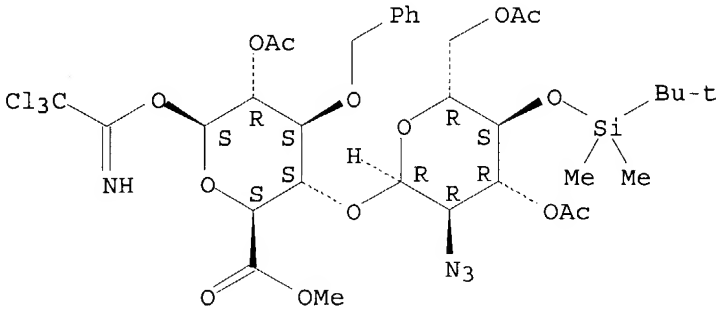
RN 444119-16-8 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[3-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-6-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



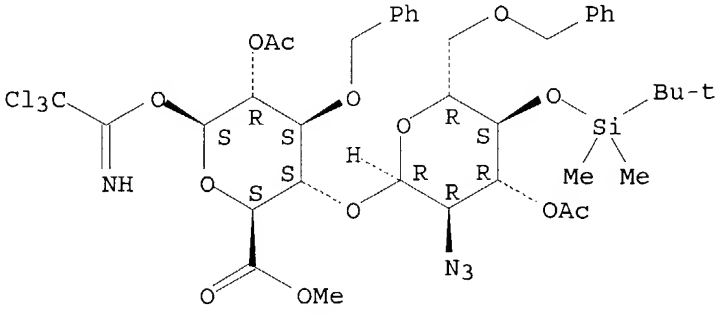
RN 444119-17-9 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[3,6-di-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 444119-18-0 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[3-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-6-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

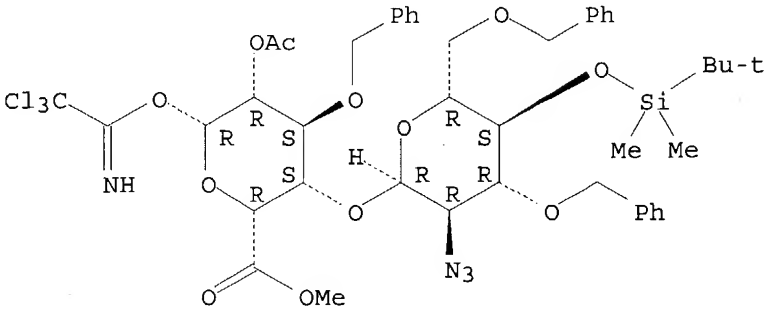
Absolute stereochemistry.



RN 444119-19-1 HCAPLUS
CN β-L-Idopyranuronic acid, 4-O-[2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate

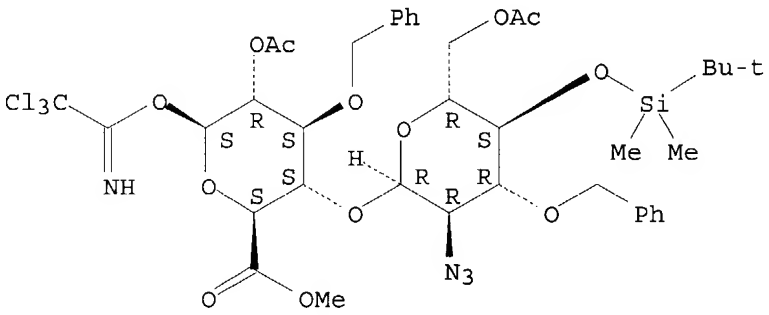
1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



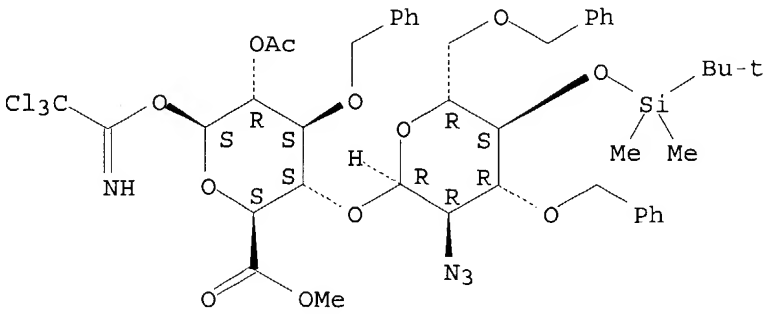
RN 444119-20-4 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[6-O-acetyl-2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



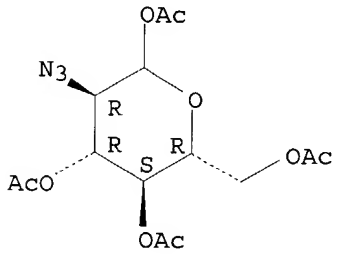
RN 444119-21-5 HCAPLUS
CN β-D-Glucopyranuronic acid, 4-O-[2-azido-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-α-D-glucopyranosyl]-3-O-(phenylmethyl)-, methyl ester, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **171032-74-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase combinatorial libraries synthesis of glycosaminoglycans as potential receptors)
RN 171032-74-9 HCAPLUS
CN D-Glucopyranose, 2-azido-2-deoxy-, 1,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L20 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:485186 HCAPLUS
DOCUMENT NUMBER: 137:185726
TITLE: Solid-Phase Synthesis of β-Mannosides
AUTHOR(S): Crich, David; Smith, Mark
CORPORATE SOURCE: Department of Chemistry, University of Illinois at Chicago, Chicago, IL, 60607-7061, USA
SOURCE: Journal of the American Chemical Society (2002), 124(30), 8867-8869
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:185726
AB The linkage of S-Ph 2,3-di-O-benzyl-α-D-thiomannopyranoside to a cross-linked polystyrene support in the form of its 4,6-O-polystyrylborinate ester is described. The activation of this polymer-supported mannosyl donor is achieved at -60 °C in dichloromethane in the presence of 2,4,6-tri-tert-butylpyrimidine with the combination 1-benzenesulfinyl piperidine and trifluoromethanesulfonic anhydride. Addition of the donor alc. at -60 °C followed by warming to room temperature and subsequent cleavage from the resin by gentle heating in aqueous acetone yields **anomerically** pure 2,3-di-O-benzyl-β-D-mannopyranosides in excellent yield. Successful, diastereoselective coupling is demonstrated with a range of primary, secondary, and tertiary glycosyl acceptors, including typical carbohydrates and threonine derivs.
CC 33-4 (Carbohydrates)
Section cross-reference(s): 32, 34
IT Coupling reaction
Solid phase synthesis
(solid phase synthesis of β-mannosides via diastereoselective coupling reaction)
IT **Disaccharides**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of β-mannosides via diastereoselective coupling reaction)
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

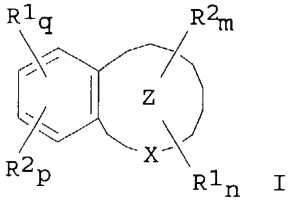
L20 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:457126 HCAPLUS
DOCUMENT NUMBER: 137:279389
TITLE: Saccharide Display on Microtiter Plates
AUTHOR(S): Bryan, Marian C.; Plettenburg, Oliver; Sears, Pamela; Rabuka, David; Wacowich-Sgarbi, Shirley; Wong, Chi-Huey
CORPORATE SOURCE: Department of Chemistry and Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92067, USA
SOURCE: Chemistry & Biology (2002), 9(6), 713-720
CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:279389
AB New insight into the importance of carbohydrates in biol. systems underscores the need for rapid synthetic and screening procedures for them. Development of an organic synthesis-compatible linker that would attach saccharides to microtiter plates was therefore undertaken to facilitate research in glycobiol. Galactosyl lipids containing small, hydrophobic groups at the **anomeric** position were screened for noncovalent binding to microtiter plates. When the lipid component was a saturated hydrocarbon between 13 and 15 carbons in length, the monosaccharide showed complete retention after aqueous washing and could be utilized in biol. assays. This alkyl chain was also successfully employed with more complex oligosaccharides in biol. assays. In light of these findings, this method of attachment of oligosaccharides to microtiter plates should be highly efficacious to high-throughput synthesis and analyses of carbohydrates in biol. assays.
CC 33-4 (Carbohydrates)
Section cross-reference(s): 9
IT Microarray technology
Solid phase synthesis
(tethered saccharides for use in oligosaccharide solid-phase library synthesis or as microarray screening devices)
IT Glycolipids
Oligosaccharides, preparation
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tethered saccharides for use in oligosaccharide solid-phase library synthesis or as microarray screening devices)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:449640 HCAPLUS
DOCUMENT NUMBER: 137:33538
TITLE: Preparation of amino acid derivatives used as perturbed membrane-binding compounds for diagnostic and therapeutic applications
INVENTOR(S): Ziv, Ilan; Shirvan, Anat; Ebner, Sharon
PATENT ASSIGNEE(S): NST Neurosurvival Technologies Ltd., Israel
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046147	A2	20020613	WO 2001-IB2282	20011203
WO 2002046147	A3	20031224		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002018431	A5	20020618	AU 2002-18431	20011203
EP 1401420	A2	20040331	EP 2001-999555	20011203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2004082499	A1	20040429	US 2003-433668	20031031
PRIORITY APPLN. INFO.:			IL 2000-140114 A	20001206
			IL 2001-141571 A	20010221
			IL 2001-145210 A	20010830
			WO 2001-IB2282 W	20011203

OTHER SOURCE(S): MARPAT 137:33538
GI



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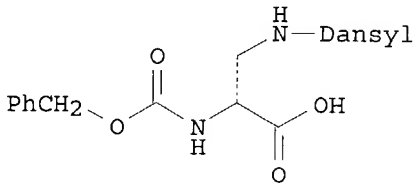

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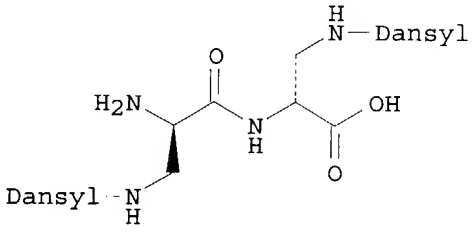


III

AB The present invention provides preparation and uses of perturbed membrane-binding compds. (PMBC) I that bind selectively to cells undergoing perturbations and alterations of their normal membrane organization, while binding to a lesser degree to cell having membranes of

normal organization [Z =cycloalkyl, cycloalkenyl, heterocyclyl, aryl, heteroaryl; X = CH, CH2, N, NH, O, S; n, m, q, p = 0-1; wherein n + q = 1; m + p = 1; R1 = A, L-A; L = D, U, U-D, D-U, D-U-O, O-U-D, D-U-NH, NH-U-D, D-U-D, U-D-U; U = H, alkylene, alkenylene, cycloalkenylene, aryl, heterocycloalkylene, heterocycloalkenylene, heteroaryl; D = O, SO0-2, SO2NH, NHSO2, NH, PO, PO2, PO2H, etc,; A = charged moieties at pH of about 7 when e = 1; when e = 2 or 3, A = polar uncharged moieties and charged moieties at pH of about 7; R2 = WR3b; W = null, secondary or tertiary amine, O, S, D; R3 = H, alkyl, alkenyl, b = 1-3; when e = 2 or 3, the C groups are linked to each other either directly or through an L moiety]. I can selectively bind to cells undergoing perturbation of their normal organization of membrane (PNOM), while binding to a much lesser degree to cells which maintain the normal organization of their membrane. The selective binding of I may be used for detection of cells or cell-derived particles, which contain perturbed membranes (PM) used for the diagnosis of diseases in which cells undergo PNOM or in a therapeutic application used to target therapeutically useful drugs to organs and tissues in the body wherein PNOM occurs, e.g., regions of cell death, thrombus formation or inflammation and also to clear body fluids from cells having PM, or of larger structures comprising such membranes, such as emboli circulating in the blood. Examples include synthesis of several examples of I, binding of I to activated red blood cells, apoptotic cells, activated platelets, detection of apoptotic cells in-vivo within a tumor and detection of chemotherapy-induced apoptosis of small intestine epithelium. For instance, D-Z-asparagine was converted in 4 steps to II. The deprotected Me ester of II was coupled to II (DCC, NHS) and the adduct saponified and deprotected to give III.

IC ICM C07C311-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
IT **Solid phase synthesis**
(preparation of solid phase linked drug for use as an imaging marker, diagnostic aid or for clearing a bodily fluid from cells with perturbed membranes)
IT **9005-49-6**, Heparin, biological studies 139639-23-9, Tissue plasminogen activator
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(agent chemical linked to invention compds. as combination drug)
IT **9005-49-6**, Heparin, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(agent chemical linked to invention compds. as combination drug)
RN 9005-49-6 HCAPLUS
CN Heparin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L20 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:371067 HCAPLUS
DOCUMENT NUMBER: 137:370283
TITLE: Sweet synthesis
AUTHOR(S): Houlton, Sarah
CORPORATE SOURCE: London, UK
SOURCE: Chemistry in Britain (2002), 38(4), 46-49
CODEN: CHMBAY; ISSN: 0009-3106
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with refs. on several strategies for the synthesis of biol. interesting sugars, including the automated glycoside solid phase synthesis, the use of the OptiMer software, glyco-randomization, and the

use of enzymes. The resulting oligosaccharides are bound to the support, and can be purified by washing off the soluble side products and excess reagents. The automated synthesizer performs reactions at different temps., and controls the delivery of all reagents to the reaction vessel and their mixing, including the donor species, which are loaded manually into the machine in small cartridges. The sugar synthesis using the OptiMer software is computer controlled and the desired oligosaccharide is selected using the software, which then dets. which building blocks and reagents can be used to perform the synthesis, and in what order. The program searches the donor library for the optimal donor for a particular reaction, considering the sugar core, the location of the unprotected hydroxyl group and, the α or β directing nature of the substituent at the 2-position, as well as predicting the **anomeric** stereochem. A method to transfer multiple enzyme sugar nucleotide regeneration systems, based on uridine diphosphate and galactose, onto solid super-beads is described.

CC 33-0 (Carbohydrates)
Section cross-reference(s): 6, 7, 9

IT **Solid phase synthesis**
(solid phase synthesis of sugars such as glycosides and oligosaccharides using OptiMer software and enzymic transglycosidation)

IT Carbohydrates, preparation
Glycosides
Oligosaccharides, preparation
RL: BPN (Biosynthetic preparation); MSC (Miscellaneous); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(solid phase synthesis of sugars such as glycosides and oligosaccharides using OptiMer software and enzymic transglycosidation)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:366734 HCAPLUS
DOCUMENT NUMBER: 137:201491
TITLE: Regioselective glycosylations in solution and on soluble and insoluble polymeric supports
AUTHOR(S): Geurtsen, Richard; Boons, Geert-Jan
CORPORATE SOURCE: Complex Carbohydrate Research Center, University of Georgia, Athens, GA, 30602, USA
SOURCE: European Journal of Organic Chemistry (2002), (9), 1473-1477
CODEN: EJOCFK; ISSN: 1434-193X
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:201491

AB A protected tetrasaccharide derived from the mucin oligosaccharides surrounding oocytes of Xenopus laevis, was prepared by a two directional glycosylation methodol. whereby an immobilized thioglycosyl donor was coupled in solution in a regioselective manner with an acceptor that has two hydroxyls of differing reactivity. High regioselectivity was achieved when MPEG was used as a polymeric support, whereas site-site reactions occurred when TentaGel was employed for immobilization.

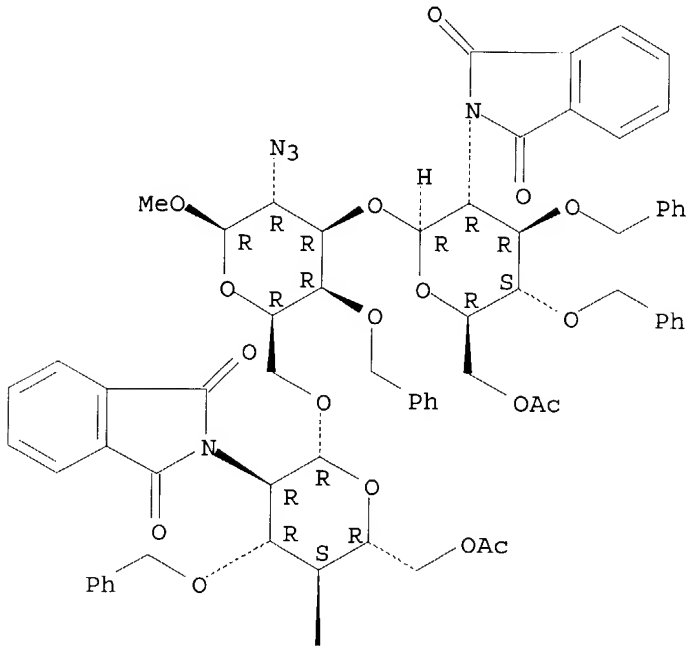
CC 33-4 (Carbohydrates)

IT **Solid phase synthesis**
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric

supports as the key step)
IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
IT **452322-51-9P**
RL: BYP (Byproduct); PREP (Preparation)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
IT 99409-34-4 **130257-28-2** 452322-37-1 452322-41-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
IT 452322-38-2DP, TentaGel amino resin bound 452322-38-2P 452322-39-3P 452322-40-6P **452322-44-0P 452322-46-2P 452322-47-3P 452322-48-4P 452322-49-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
IT **452322-42-8P 452322-43-9DP**, TentaGel amino resin bound **452322-45-1P 452322-50-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
IT **452322-51-9P**
RL: BYP (Byproduct); PREP (Preparation)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
RN 452322-51-9 HCAPLUS
CN β-D-Galactopyranoside, methyl O-6-O-acetyl-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→3)-O-[6-O-acetyl-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)]-2-azido-2-deoxy-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



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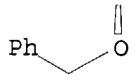
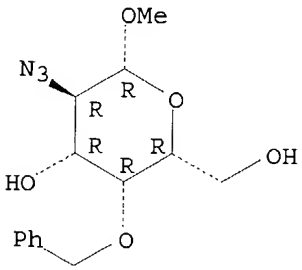


IT **130257-28-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
RN 130257-28-2 HCAPLUS
CN β-D-Galactopyranoside, methyl 2-azido-2-deoxy-4-O-(phenylmethyl)-
(9CI) (CA INDEX NAME)

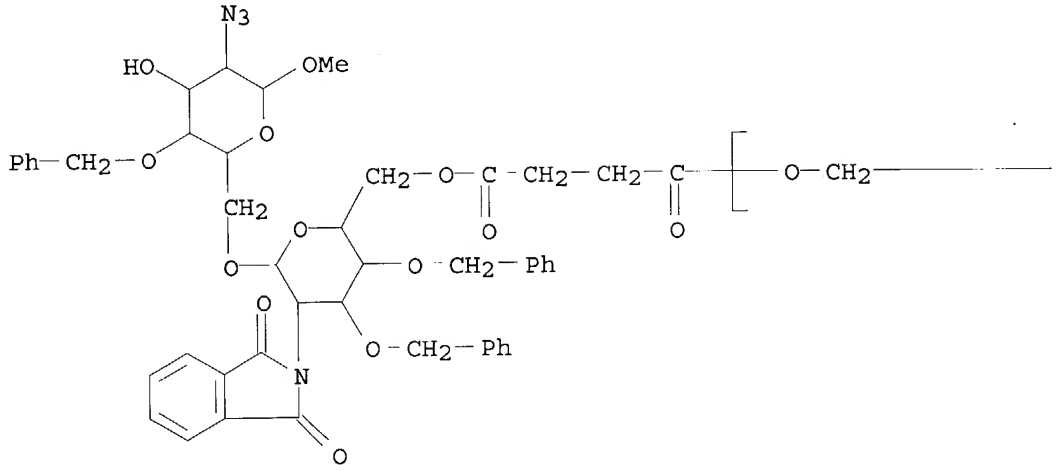
Absolute stereochemistry.



IT **452322-44-0P 452322-46-2P 452322-47-3P**
452322-48-4P 452322-49-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)

RN 452322-44-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, ester with methyl 2-azido-6-O-[6-O-(3-carboxy-1-oxopropyl)-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl]-2-deoxy-4-O-(phenylmethyl)-β-D-galactopyranoside (9CI) (CA INDEX NAME)

PAGE 1-A



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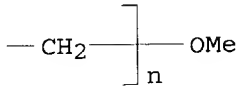
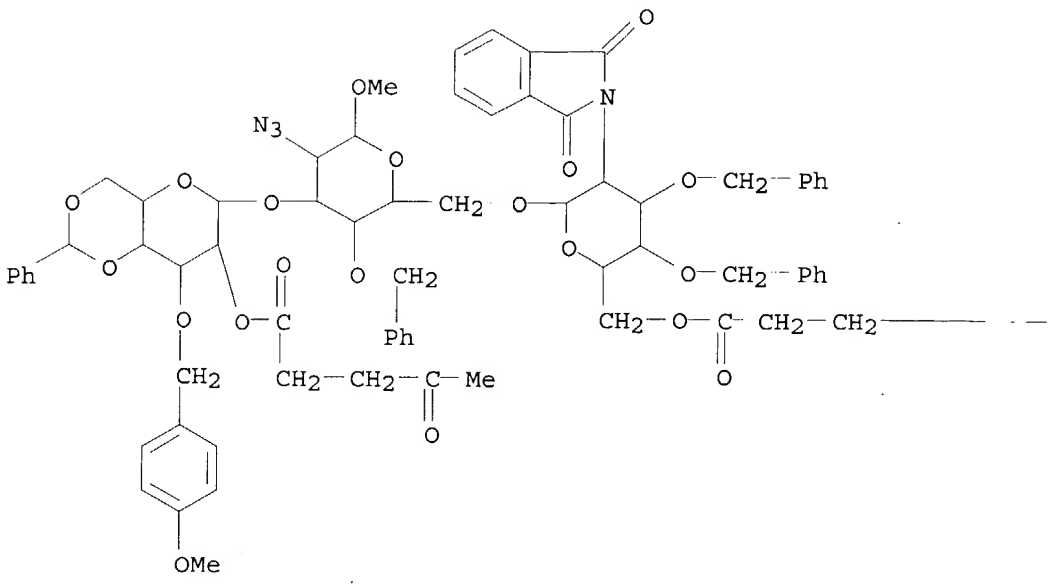


RN 452322-46-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, ester with methyl O-6-O-(3-carboxy-1-oxopropyl)-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-O-[2-O-(1,4-dioxopentyl)-3-O-[(4-methoxyphenyl)methyl]-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→3)]-2-azido-2-deoxy-4-O-(phenylmethyl)-β-D-galactopyranoside (9CI) (CA INDEX NAME)

PAGE 1-A



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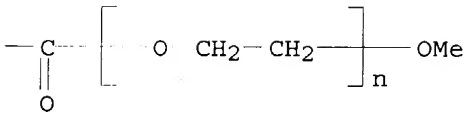

RN 452322-47-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, ester with methyl O-6-O-(3-carboxy-1-oxopropyl)-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)-O-[3-O-[(4-methoxyphenyl)methyl]-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→3)]-2-azido-2-deoxy-4-O-(phenylmethyl)-β-D-galactopyranoside (9CI) (CA INDEX NAME)

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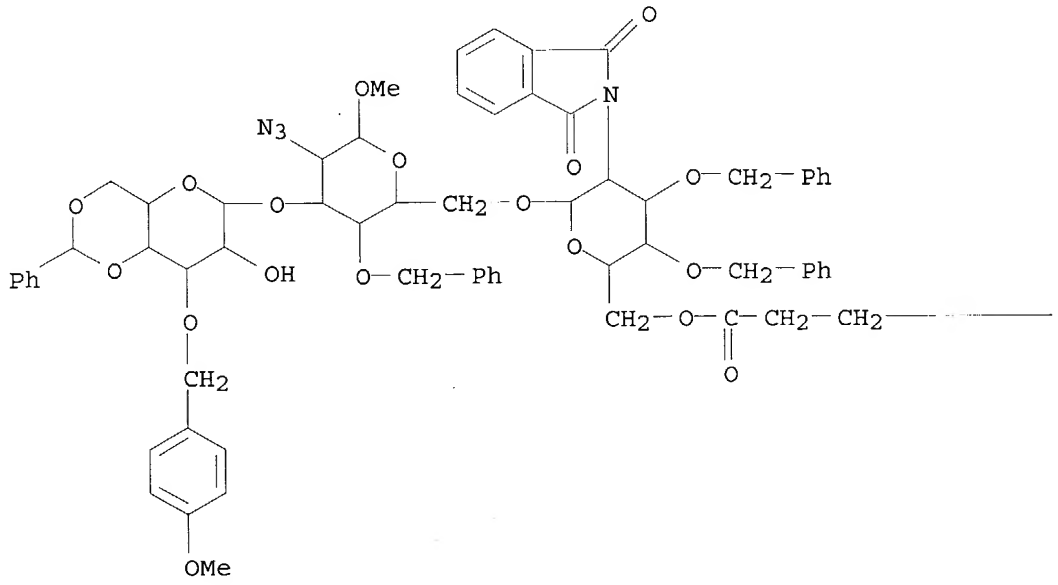

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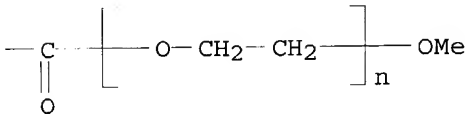
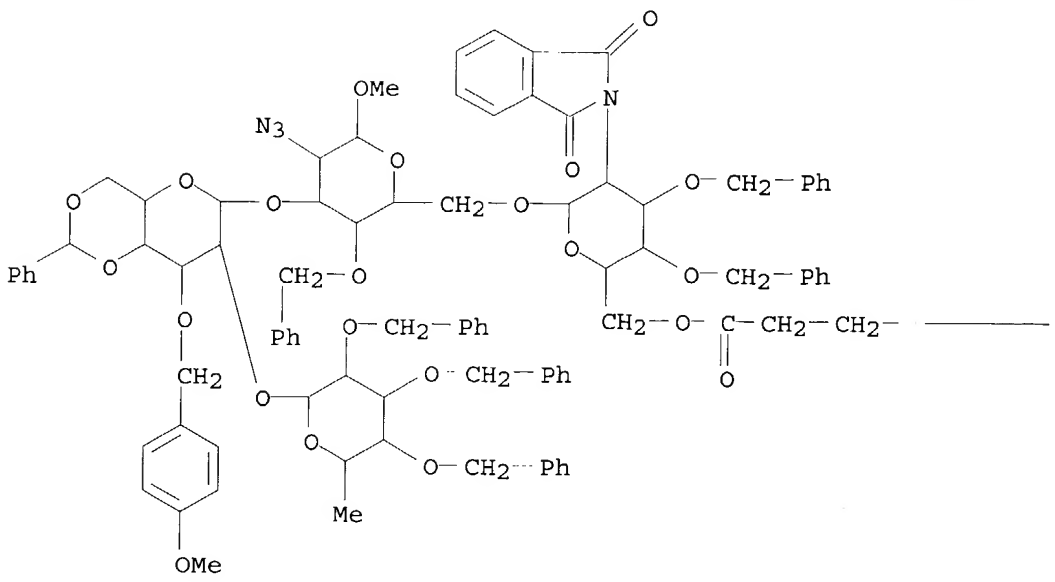


RN 452322-48-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, ester with methyl O-6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl-(1→2)-O-3-O-[(4-methoxyphenyl)methyl]-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→3)-O-[6-O-(3-carboxy-1-oxopropyl)-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)]-2-azido-2-deoxy-4-O-(phenylmethyl)-β-D-galactopyranoside (9CI) (CA INDEX NAME)

PAGE 1-A



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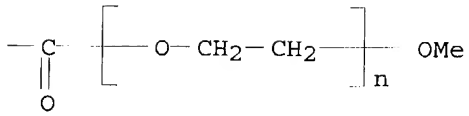
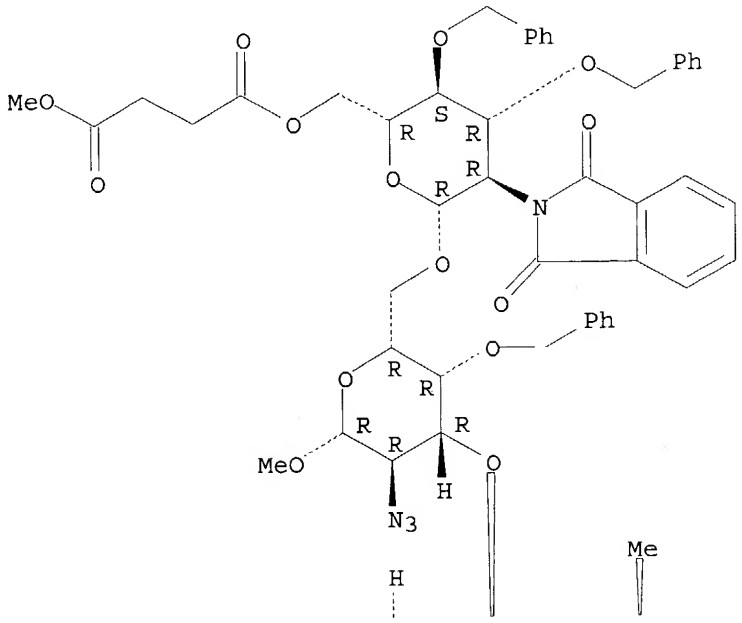


RN 452322-49-5 HCAPLUS
CN β-D-Galactopyranoside, methyl O-6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl-(1→2)-O-3-O-[(4-methoxyphenyl)methyl]-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→3)-O-[2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-O-(4-methoxy-1,4-dioxobutyl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)]-2-azido-2-deoxy-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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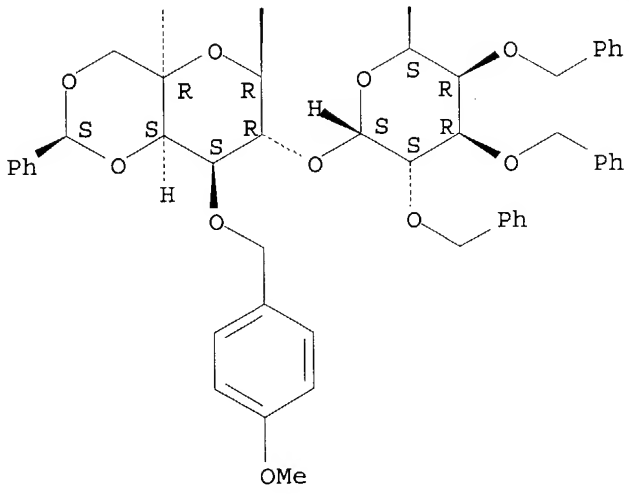
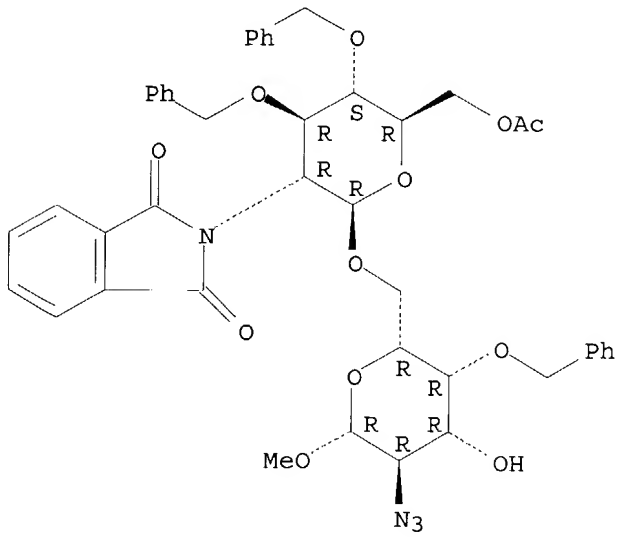


IT **452322-42-8P 452322-43-9DP**, TentaGel amino resin bound
452322-45-1P 452322-50-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a protected tetrasaccharide based on the mucin oligosaccharides surrounding oocytes of Xenopus laevis via regioselective glycosylations in solution and on soluble and insol. polymeric
supports as the key step)
RN 452322-42-8 HCAPLUS

CN β-D-Galactopyranoside, methyl 6-O-[6-O-acetyl-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl]-2-azido-2-deoxy-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

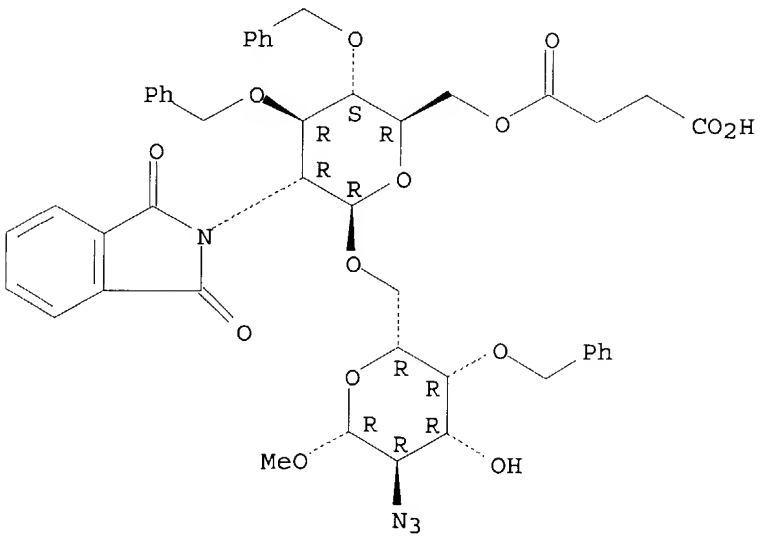
Absolute stereochemistry. Rotation (+).



RN 452322-43-9 HCAPLUS

CN β-D-Galactopyranoside, methyl 2-azido-6-O-[6-O-(3-carboxy-1-oxopropyl)-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl]-2-deoxy-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

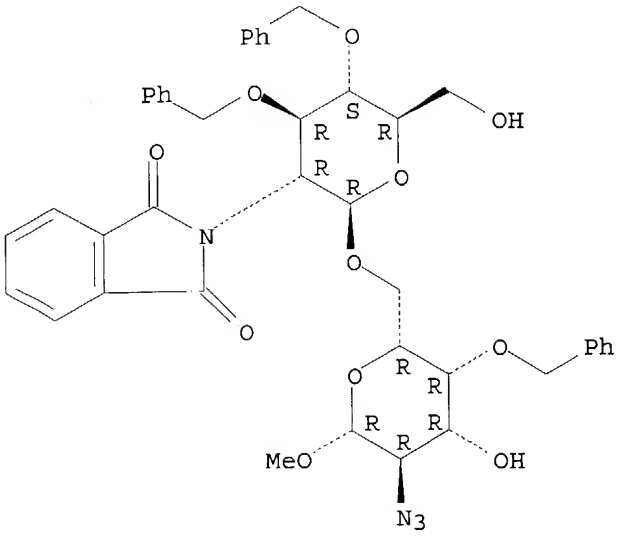


RN 452322-45-1 HCAPLUS

CN β-D-Galactopyranoside, methyl 2-azido-2-deoxy-6-O-[2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-

glucopyranosyl]-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



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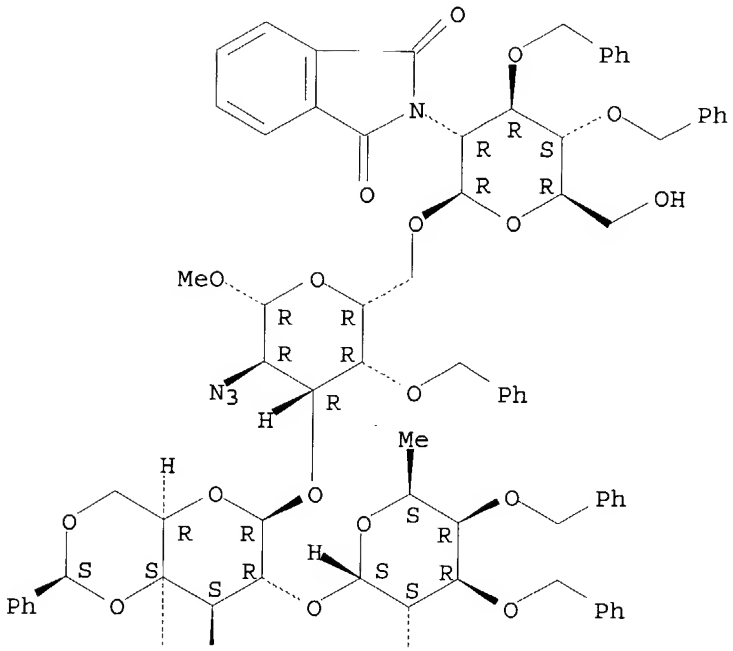
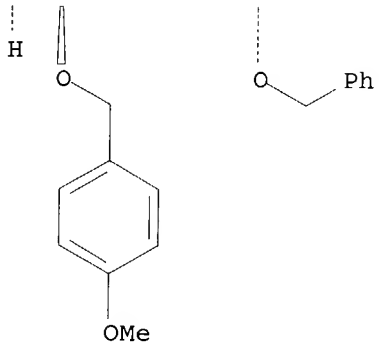
CN β-D-Galactopyranoside, methyl O-6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl-(1→2)-O-3-O-[(4-methoxyphenyl)methyl]-4,6-O-[(S)-phenylmethylene]-β-D-galactopyranosyl-(1→3)-O-[2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,4-bis-O-(phenylmethyl)-β-D-glucopyranosyl-(1→6)]-2-azido-2-deoxy-4-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

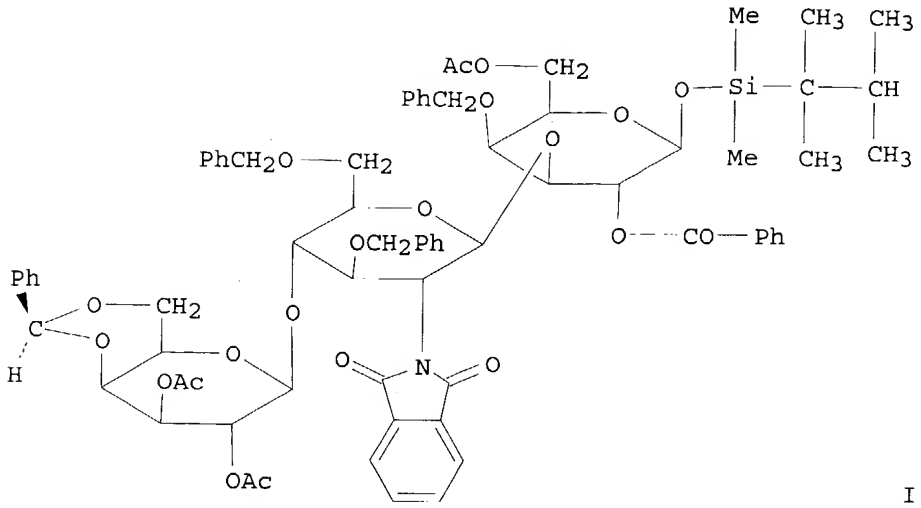


REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:150743 HCAPLUS
DOCUMENT NUMBER: 136:355375
TITLE: Oligosaccharide synthesis in solution and on solid support with glycosyl phosphates
AUTHOR(S): Palmacci, Emma R.; Plante, Obadiah J.; Seeberger, Peter H.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: European Journal of Organic Chemistry (2002), (4), 595-606

CODEN: EJOCFK; ISSN: 1434-193X
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review containing the synthesis of glycosyl 1-phosphate triesters and their use in solution-phase and solid-phase oligosaccharide chemical The preparation of **anomeric** phosphates from lactol and glycal starting materials and their application in the synthesis of nucleotide diphosphate sugars is described. Glycosyl phosphates have been employed successfully in the construction of O- and C-glycosides and give highly trans-selective coupling products even in the absence of C-2 participating groups. Solid-phase techniques utilizing glycosyl phosphate triesters have enabled the assembly of biol. important complex carbohydrates. Most recently, glycosyl phosphates have been the basis for the development of an automated oligosaccharide synthesizer.
CC 33-0 (Carbohydrates)
ST review glycosyl phosphate ester synthon oligosaccharide solid phase prepn; **anomeric** glycosyl phosphate ester synthon nucleotide phosphate prepn review
IT **Solid phase synthesis**
Synthons
(review covering the solution and solid phase synthesis of oligosaccharides and nucleotides using glycosyl phosphates as synthons)
IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis; review covering the solution and solid phase synthesis of oligosaccharides and nucleotides using glycosyl phosphates as synthons)
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:879516 HCAPLUS
DOCUMENT NUMBER: 136:232453
TITLE: Solid phase syntheses of oligomannosides and of a lactosamine containing milk trisaccharide using a benzoate linker
AUTHOR(S): Grathwohl, Matthias; Schmidt, Richard R.
CORPORATE SOURCE: Alchemia Pty. Ltd., Brisbane Technology Park, Brisbane, 4113, Australia
SOURCE: Synthesis (2001), (15), 2263-2272
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:232453
GI



I

AB Galactose and mannose building blocks were designed for the solid phase synthesis of oligosaccharides (SPOS). Both compds. were employed after condensation with benzoic acid function containing resin in SPOS of human milk trisaccharide I and oligomannosides (α-(1→2)-linked dimer, tetramer, and hexamer). Thus, in this approach a special linker development was not required and with the temporary protective groups phenoxyacetyl (PA) and 9-fluorenylmethoxycarbonyl (Fmoc) the strategy offers the addnl. advantage of having the **anomeric** center at the reducing end available for further manipulations.

CC 33-4 (Carbohydrates)
Section cross-reference(s): 9

IT Glycosylation
Solid phase synthesis
(preparation of oligosaccharides using acid-functionalized solid-phase synthesis)

IT **Oligosaccharides, preparation**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of oligosaccharides using acid-functionalized solid-phase synthesis)

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:828691 HCAPLUS
DOCUMENT NUMBER: 136:118674
TITLE: Solid-Phase Synthesis of a Branched Hexasaccharide Using a Highly Efficient Synthetic Strategy
AUTHOR(S): Roussel, Fabien; Takhi, Mohamed; Schmidt, Richard R.
CORPORATE SOURCE: Fachbereich Chemie, Universitaet Konstanz, Konstanz, D-78457, Germany
SOURCE: Journal of Organic Chemistry (2001), 66(25), 8540-8548
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The solid-phase synthesis of branched lacto-N-neohexaose derivative I occurring in human milk is described. A new building block of lactose bearing the orthogonal temporary hydroxy protecting groups 9-fluorenylmethyloxycarbonyl (Fmoc) and levulinoyl (Lev) has been prepared Its use, together with that of a lactosamine donor, glucosamine donor, and O-galactosyl trichloroacetimidate, has enabled the preparation of the hexasaccharide following two different approaches in excellent overall yield (43%, 90% per step over eight steps). An addnl. key feature of this work is the successful use of newly prepared ester-type linker II, having a benzylic spacer connected to the **anomeric** oxygen. This linker presents the advantage of producing a benzylic **anomeric** moiety after cleavage from the polymer support, which could be easily removed to obtain the unprotected oligosaccharide I.

CC 33-7 (Carbohydrates)

IT **Solid phase synthesis**
(solid-phase synthesis of a branched hexasaccharide using a highly efficient synthetic strategy)

IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of a branched hexasaccharide using a highly efficient synthetic strategy)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:284222 HCAPLUS
DOCUMENT NUMBER: 134:307611
TITLE: Conjugated polymer tag complexes and their preparation and use in assays
INVENTOR(S): Leif, Robert C.; Franson, Richard C.; Vallarino, Lidia
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 104 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027625	A1	20010419	WO 2000-US27787	20001007
W: CA, CH, DE, FI, GB, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1221052	A1	20020710	EP 2000-968871	20001007
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

PRIORITY APPLN. INFO.: US 1999-158718P P 19991008
WO 2000-US27787 W 20001007

AB Processes are described for: (1) the sequential solid phase synthesis of polymers with at least one tag, which can be a light emitting and/or absorbing mol. species (optical-label), a paramagnetic or radioactive label, or a tag that permits the phys. separation of particles including cells. When multiple optical-labels are suitably arranged in three-dimensional

space, the energy transfer from one mol. species to another can be maximized and the radiationless loss between members of the same mol. species can be minimized; (2) the coupling of these polymers to biol. active and/or biol. compatible mols. through peripheral pendant substituents having at least one reactive site; and (3) the specific cleavage of the coupled polymer from a solid phase support. The tagged-peptide or polymers produced by these processes and their conjugates with an analyte-binding species, such as a monoclonal antibody or a polynucleotide probe are described. When functionalized europium macrocyclic complexes, as taught in our U.S. patents 5,373,093 and 5,696,240, are bound to polylysine and other peptides, the emitted light increases linearly with the amount of bound macrocyclic complex. Similar linearity will also result for multiple luminescent macrocyclic complexes of other lanthanide ions, such as samarium, terbium, and dysprosium, when they are bound to a polymer or mol.

IC ICM G01N033-545
ICS G01N033-543; G01N033-576; G01N033-532; C08F002-10; C08F002-50; C08F290-14

CC 9-15 (Biochemical Methods)
Section cross-reference(s): 2, 6, 34, 78, 79, 80

IT Amino group
Apoptosis
Azo dyes
B cell (lymphocyte)
Bacillus stearothermophilus
Carboxyl group
Cell cycle
Centromeres
Chromosome
Combinatorial chemistry
Conformation
Cyanine dyes
Cyano group
Disulfide group
Drugs
Drugs of abuse
Energy transfer
Fluorescent indicators
Fluorescent substances
Formyl group
Human immunodeficiency virus
Human immunodeficiency virus 1
Hydroxyl group
Leukocyte
Luminescence
Neoplasm
Nocardia otitidiscaviarum
Nucleic acid hybridization
Nucleosome
Optical absorption
Pesticides
Reducing agents
Ribosome
Solid phase synthesis
Stains, biological
Sulfhydryl group
T cell (lymphocyte)
Telomeres (chromosome)
pH

(conjugated polymer tag complexes and preparation and use in assays)

IT Agglutinins and Lectins
Albumins, analysis
Antigens
Avidins
Blood-group substances
CD20 (antigen)
CD4 (antigen)
CD8 (antigen)
Carcinoembryonic antigen
Collagens, analysis
Cyclins
DNA
Ecdysteroids
Estrogen receptors
Estrogens
Globulins, analysis
Glucocorticoid receptors
Glycoproteins, general, analysis
Glycosaminoglycans, analysis
Hemoglobins
Hormone receptors
Hormones, animal, analysis
Immunoglobulins
Keratins
Lymphokines
Nucleic acids
Nucleosides, analysis
P-glycoproteins
Peptides, analysis
Polynucleotides
Polysaccharides, analysis
Progesterone receptors
Proliferating cell nuclear antigen
Prostaglandins
Proteins, general, analysis
RNA
Toxins
Viral RNA
Vitamins
mRNA
neu (receptor)
p53 (protein)
α-Fetoproteins
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(conjugated polymer tag complexes and preparation and use in assays)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:85054 HCAPLUS
DOCUMENT NUMBER: 134:252640
TITLE: Chemoselective Elaboration of O-Linked Glycopeptide Mimetics by Alkylation of 3-ThioGalNAc
AUTHOR(S): Marcaurelle, Lisa A.; Bertozzi, Carolyn R.
CORPORATE SOURCE: Center for New Directions in Organic Synthesis, Department of Chemistry, University of California, Berkeley, CA, 94720, USA

SOURCE: Journal of the American Chemical Society (2001), 123(8), 1587-1595
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:252640

AB A critical branch point in mucin-type oligosaccharides is the β1 → 3 glycosidic linkage to the core α-N-acetylgalactosamine (GalNAc) residue. We report here a strategy for the synthesis of O-linked glycopeptide analogs that replaces this linkage with a thioether amenable to construction by chemoselective ligation. The key building block was a 2-azido-3-thiogalactose-Thr analog that was incorporated into a peptide by fluorenylmethoxycarbonyl (Fmoc)-based solid-phase peptide synthesis. Higher order oligosaccharides were readily generated by alkylation of the corresponding 3-thioGalNAc with N-bromoacetamido sugars. The rapid assembly of "core 1"and "core 3" O-linked glycopeptide mimetics was accomplished in this fashion.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 33

IT **Solid phase synthesis**
(peptide; preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

IT Glycopeptides
Oligosaccharides, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

IT 2873-29-2, Tri-O-acetyl-D-glucal 4229-38-3 6318-23-6, β-D-Galactopyranosylamine 120791-76-6 **147254-13-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

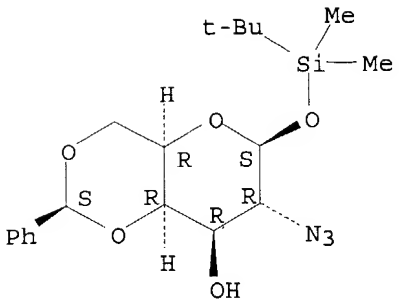
IT 33758-19-9P 58394-32-4P 73982-43-1P **331633-88-6P** **331633-89-7P** 331633-90-0P 331633-91-1P 331633-92-2P 331633-93-3P 331633-94-4P **331633-95-5P** 331633-96-6P **331633-99-9P** **331634-00-5P** **331634-01-6P** **331634-02-7P** 331634-04-9P 331634-05-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

IT **331633-97-7P** 331633-98-8P **331634-03-8P** 331634-06-1P 331634-07-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

IT **147254-13-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

RN 147254-13-5 HCAPLUS
CN β-D-Galactopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-4,6-O-[(S)-phenylmethylene]- (9CI) (CA INDEX NAME)

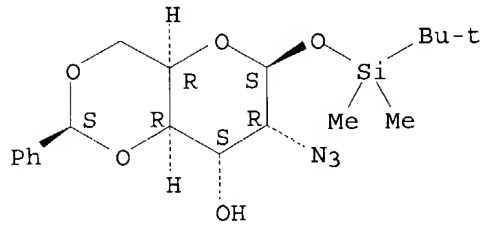
Absolute stereochemistry.



IT **331633-88-6P 331633-89-7P 331633-95-5P**
331633-99-9P 331634-00-5P 331634-01-6P
331634-02-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)

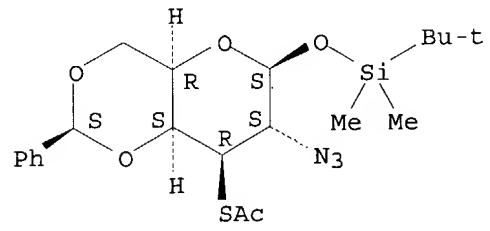
RN 331633-88-6 HCAPLUS
CN β-D-Gulopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-4,6-O-[(S)-phenylmethylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



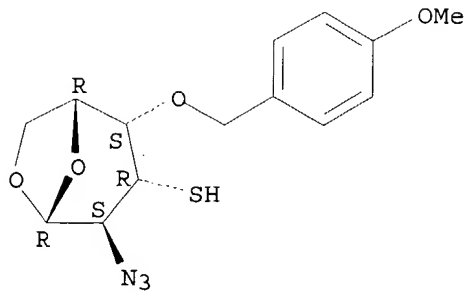
RN 331633-89-7 HCAPLUS
CN β-D-Galactopyranose, 2-azido-2-deoxy-1-O-[(1,1-dimethylethyl)dimethylsilyl]-4,6-O-[(S)-phenylmethylene]-3-thio-, 3-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



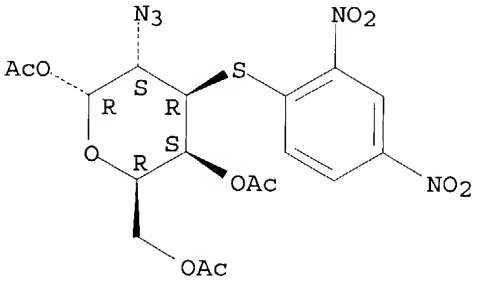
RN 331633-95-5 HCAPLUS
CN β-D-Galactopyranose, 1,6-anhydro-2-azido-2-deoxy-4-O-[(4-methoxyphenyl)methyl]-3-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



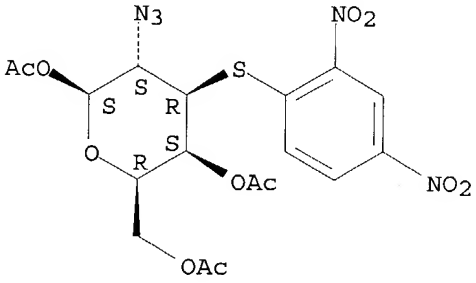
RN 331633-99-9 HCAPLUS
CN α-D-Galactopyranose, 2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-3-thio-, 1,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



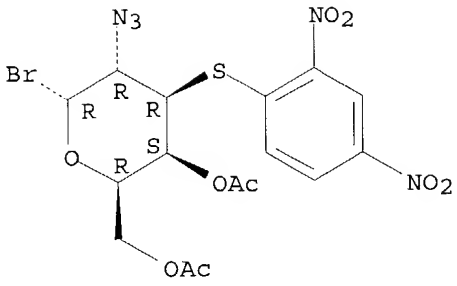
RN 331634-00-5 HCAPLUS
CN β-D-Galactopyranose, 2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-3-thio-, 1,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



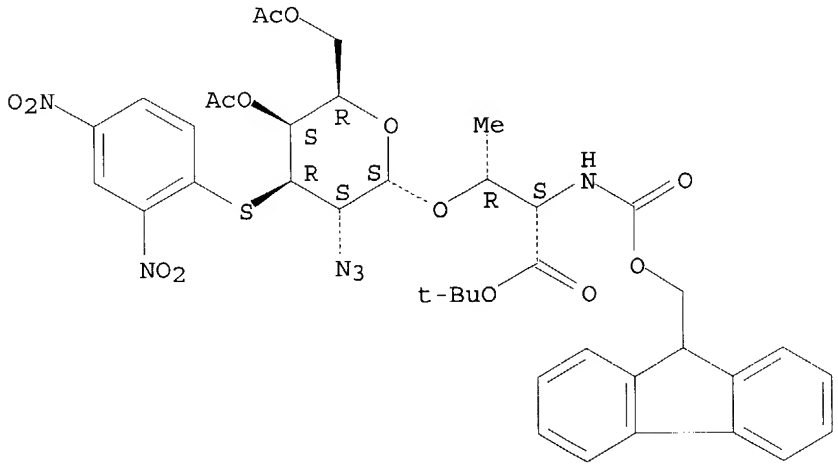
RN 331634-01-6 HCAPLUS
CN α-D-Galactopyranosyl bromide, 2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-3-thio-, 4,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



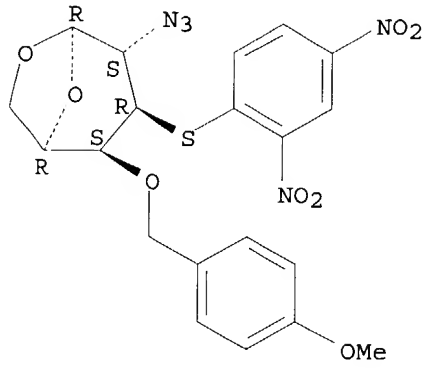
RN 331634-02-7 HCAPLUS
CN L-Threonine, O-[4,6-di-O-acetyl-2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-3-thio-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



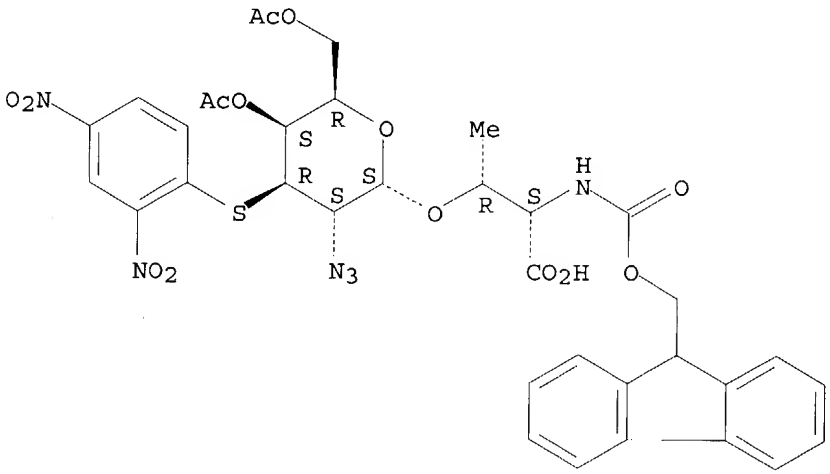
IT **331633-97-7P 331634-03-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of O-linked glycopeptide mimetics by chemoselective alkylation of 3-thio-N-acetylgalactosamine)
RN 331633-97-7 HCAPLUS
CN β-D-Galactopyranose, 1,6-anhydro-2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-4-O-[(4-methoxyphenyl)methyl]-3-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 331634-03-8 HCAPLUS
CN L-Threonine, O-[4,6-di-O-acetyl-2-azido-2-deoxy-3-S-(2,4-dinitrophenyl)-3-thio-α-D-galactopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:450046 HCAPLUS
DOCUMENT NUMBER: 133:267114
TITLE: Peptide synthesis on chitosan/chitin
AUTHOR(S): Neugebauer, W. A.; D'Orleans-Juste, P.; Bkaily, G.
CORPORATE SOURCE: Department of Pharmacology, University of Sherbrooke, Sherbrooke, QC, J1H 5N4, Can.
SOURCE: Advances in Chitin Science (2000), 4(EUCHIS'99), 411-416
CODEN: ACSCFF
PUBLISHER: Universitaet Potsdam, Universitaetsbibliothek
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The approach of using chitosan/chitin as a support for solid-phase peptide synthesis in batch strategy is described and illustrated by production of

three peptides using different cleavable linkers: 4-(2',4'-dimethoxyphenyl-Fmoc-aminomethyl)-phenoxy-acetic acid; 4-hydroxymethyl-3-methoxyphenoxy-acetic acid; 4-methylene-3-methoxy-phenol. Those peptides were designed as putative Ras protein farnesyl transferase inhibitors: Fmoc-Cys-Aib-Aib-Met-NH2; Fmoc-Cys-Aib-Aib-Met-OH; Fmoc-Cys-Val-Gly-Met-NH2. This work shows that chitosan/chitin in its derivatized form can be utilized as a support for peptide synthesis.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 6, 33

IT **Solid phase synthesis**
(peptide; peptide synthesis on chitosan/chitin)

IT 121-33-5P, Vanillin 1398-61-4P, Chitin **9012-76-4P**, Chitosan 83590-77-6P 126828-35-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(peptide synthesis on chitosan/chitin)

IT **9012-76-4P**, Chitosan
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(peptide synthesis on chitosan/chitin)

RN 9012-76-4 HCAPLUS
CN Chitosan (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:210201 HCAPLUS
DOCUMENT NUMBER: 132:251425
TITLE: Synthetic peptides, conjugation reagents and methods
INVENTOR(S): Bertozzi, Carolyn; Marcaurelle, Lisa; Rodriguez, Elena
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000017226	A1	20000330	WO 1999-US22129		19990923
W: AU, CA, JP					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9960596	A1	20000410	AU 1999-60596		19990923
EP 1115740	A1	20010718	EP 1999-969419		19990923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
US 6465612	B1	20021015	US 1999-405516		19990923
US 2003073157	A1	20030417	US 2002-268813		20021010
PRIORITY APPLN. INFO.:			US 1998-101494P	P	19980923
			US 1999-405516	A3	19990923
			WO 1999-US22129	W	19990923

OTHER SOURCE(S): MARPAT 132:251425
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides methods and compns. useful for making synthetic peptide conjugates comprising structure I (R = lower (un)substituted alkyl, O, NH, S; P = amine protection group). In more particular embodiments, the compns. comprise α-amine protected 4,5-dehydroleucine or α-amine protected (2S)-aminolevulinic acid where P is Fmoc (9-fluorenylmethoxycarbonyl). These compds. may be incorporated into synthetic peptides using standard Fmoc-based solid-phase methods to give ketone-containing peptides which can be modified with an O- or N-linked glycoconjugate, or a detectable label. Thus, oxime-linked drosocin neo-glycopeptide (II) was prepared and found to be four-fold more potent in blocking bacterial growth (IC50 = 0.16 ± 0.04 μM) than un-glycosylated drosocin (IC50 =0.63 ± 0.05), and similar in potency to native drosocin (IC50 = 0.10 ± 0.02). Also, a strategy for convergent assembly of O-linked glycopeptide analogs using the principle of chemoselective ligation is described and demonstrated in the synthesis of chemo-selectively litigated analogs of antibacterial glycopeptide drosocin (e.g. III, IC50 = 0.12 ± 0.02).

IC ICM C07K001-06
ICS C07K001-10

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 33

IT **Solid phase synthesis**
(peptide; solid-phase preparation of ketone-containing peptides for site-specific conjugation)

IT **Oligosaccharides, preparation**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of ketone-containing peptides for site-specific conjugation)

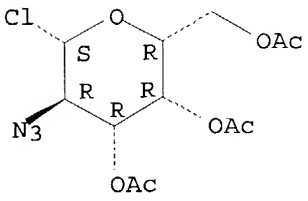
IT 3063-71-6 3554-93-6 3878-55-5, Monomethyl succinate 6291-42-5, β-Lactose octaacetate 15839-70-0, GDP-fucose 42989-85-5
67817-37-2 76863-28-0 87392-13-0 91926-84-0 116783-35-8
143658-73-5 170590-83-7 170590-84-8 214598-63-7 215037-70-0
215037-73-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase preparation of ketone-containing peptides for site-specific conjugation)

IT 30854-62-7P 30854-63-8P 51268-84-9P 87720-55-6P 170590-90-6P
195829-07-3P 195970-61-7P 195970-62-8P 195970-68-4P 195970-69-5P
214598-61-5P 214598-62-6P 215037-65-3P 215037-67-5P 215037-72-2P
215037-76-6P 215037-77-7P 215037-78-8P 218432-09-8P
262381-44-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of ketone-containing peptides for site-specific conjugation)

IT **67817-37-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase preparation of ketone-containing peptides for site-specific conjugation)

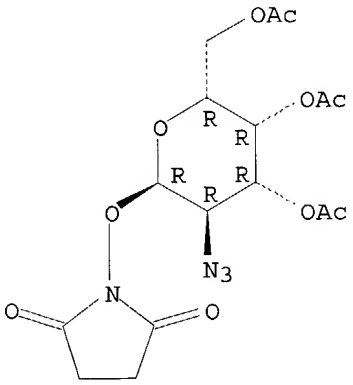
RN 67817-37-2 HCAPLUS
CN β-D-Galactopyranosyl chloride, 2-azido-2-deoxy-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **215037-76-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of ketone-containing peptides for site-specific conjugation)
RN 215037-76-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[(3,4,6-tri-O-acetyl-2-azido-2-deoxy-α-D-galactopyranosyl)oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:117063 HCAPLUS
DOCUMENT NUMBER: 132:137667
TITLE: Solid phase synthesis of thio-oligosaccharides
INVENTOR(S): Hindsgaul, Ole; Hummel, Gerd
PATENT ASSIGNEE(S): Synsorb Biotech, Inc., Can.
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000008038	A2	20000217	WO 1999-CA726	19990806
WO 2000008038	A3	20000615		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,

IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6177553	B1	20010123	US 1998-130897	19980807
CA 2337752	AA	20000217	CA 1999-2337752	19990806
AU 9952725	A1	20000228	AU 1999-52725	19990806
EP 1102780	A2	20010530	EP 1999-938076	19990806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002522445	T2	20020723	JP 2000-563671	19990806
NO 2001000637	A	20010404	NO 2001-637	20010206
PRIORITY APPLN. INFO.:			US 1998-130897 A	19980807
			WO 1999-CA726 W	19990806

OTHER SOURCE(S): CASREACT 132:137667

AB Solid phase synthetic methods of forming sulfur-linked disaccharides and oligosaccharides are described, wherein a saccharide or oligosaccharide bearing a protected thiol-group at the **anomeric** carbon is immobilized onto a solid support at any position other than the **anomeric** carbon atom of the reducing sugar. The resultant immobilized thiol, or a derivative thereof, undergoes nucleophilic saccharide addition to provide a di- or oligosaccharide.

IC ICM C07H
CC 33-4 (Carbohydrates)
IT **Solid phase synthesis**
(solid phase synthesis of thio-oligosaccharides via nucleophilic addition)
IT **Disaccharides**
Oligosaccharides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of thio-oligosaccharides via nucleophilic addition)

L20 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:694715 HCAPLUS
DOCUMENT NUMBER: 132:93556
TITLE: Solid-Phase Oligosaccharide Synthesis: Preparation of Complex Structures Using a Novel Linker and Different Glycosylating Agents
AUTHOR(S): Andrade, Rodrigo B.; Plante, Obadiah J.; Melean, Luis G.; Seeberger, Peter H.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Organic Letters (1999), 1(11), 1811-1814
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:93556

AB A β-(1→4)-linked trisaccharide was prepared in 53% yield on a polymer support using glycosyl phosphates and released by cross-metathesis of a novel linker to reveal the **anomeric** n-pentenyl glycoside. Heptasaccharide was prepared in 9% yield in 14 steps.

CC 33-4 (Carbohydrates)
IT Glycosylation
Solid phase synthesis
(solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)

IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:404472 HCAPLUS
DOCUMENT NUMBER: 131:116409
TITLE: Solid-phase synthesis of thio-oligosaccharides
AUTHOR(S): Hummel, Gerd; Hindsgaul, Ole
CORPORATE SOURCE: Department of Chemistry, University of Alberta, Edmonton, AB, T6G 2G2, Can.
SOURCE: Angewandte Chemie, International Edition (1999), 38(12), 1782-1784
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:116409
AB We present here a new and efficient method for the stereoselective solid-phase synthesis of thio-oligosaccharides. Side products arising from elimination of the triflates could be easily removed by washing the resin after glycosylation. The protection of the **anomeric** thiol function as an Et disulfide proved to be compatible with common carbohydrate reaction conditions and served as an ideal protective group. The key feature of this method is that a highly reactive nucleophilic sugar-thiolate without protecting groups is used as the nucleophile for coupling to triflate-activated glycosides.
CC 33-4 (Carbohydrates)
IT Coupling reaction
Protective groups
Solid phase synthesis
(solid phase synthesis of thio-oligosaccharides via stereoselective coupling reaction using Et disulfide as protective group.)
IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of thio-oligosaccharides via stereoselective coupling reaction using Et disulfide as protective group.)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:355782 HCAPLUS
DOCUMENT NUMBER: 131:5477
TITLE: A combinatorial library of moenomycin analogs as antibacterial agents
INVENTOR(S): Allanson, Nigel Mark; Chan, Tin Yau; Hatzenbuhler, Nicole T.; Jain, Rakesh K.; Kakarla, Ramesh; Liang, Rui; Liu, Dashan; Silva, Domingos; Sofia, Michael
PATENT ASSIGNEE(S): Intercardia, Inc., USA
SOURCE: PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9926956	A1	19990603	WO 1998-US24406	19981117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6114309	A	20000905	US 1997-975229	19971121
AU 9915879	A1	19990615	AU 1999-15879	19981117
EP 1047703	A1	20001102	EP 1998-960228	19981117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001524484	T2	20011204	JP 2000-522113	19981117
US 6207820	B1	20010327	US 1999-394045	19990913
US 6274716	B1	20010814	US 1999-394044	19990913
PRIORITY APPLN. INFO.:			US 1997-975229	A1 19971121
			WO 1998-US24406	W 19981117

OTHER SOURCE(S): MARPAT 131:5477

AB A combinatorial chemical library of compds. structurally related to the moenomycin class of antibiotics has formula DAPR wherein D is a donor mono- or disaccharide, A is an acceptor monosaccharide, and P-R is a lipophosphoglycerate mimetic group. Members of the library have a glycosidic linkage between the **anomeric** carbon of D and the C2 carbon of A, and the D-A moiety is in turn covalently linked through the **anomeric** carbon of A to the P-R group. Members of the library exhibit their greatest structural diversity in terms of substitutions occurring at the C3 position of the A residue, substitutions at the C2 position of the D residue, and different P-R groups used in assembling the compds. Members of the library are preferably synthesized by solid phase techniques involving stepwise coupling of the resp. units to a support, functionalizing the A and/or D saccharides either before or after immobilizing them on the support, and cleaving the assembled compds. from the support. Preferred functionalities attached to the sugar residues are amides, carbamates, ureas, sulfonamides, substituted amines, esters, carbonates, and sulfates. Exemplary P-R groups are derivs. of homoserine, glyceric acid, salicylates and mandelic acid. Thus, Ph 3-azido-3-deoxy-4-O-benzoyl-1-thio-β-D-glucopyranosiduronic acid was prepared Members of the library can be screened for anti-microbial activity by contacting them with a culture of microbes and monitoring the growth rate of the microbes.

IC ICM C07H001-00
ICS C07H005-00; C07H015-00

CC 33-8 (Carbohydrates)
Section cross-reference(s): 10

IT Antibacterial agents
Antibiotics
Combinatorial library
Solid phase synthesis
(combinatorial library of moenomycin analogs as antibacterial agents)

IT **Disaccharides**
Uronic acids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(combinatorial library of moenomycin analogs as antibacterial agents)

IT 153984-52-2P 157239-66-2P 165875-77-4P 179072-54-9P 185612-78-6P
196304-96-8P **196397-82-7P 196397-83-8P**
196397-84-9P 205676-47-7P 205676-51-3P 220774-83-4P
225241-02-1P 225241-19-0P 225241-25-8P 225241-33-8P 225241-69-0P
225241-70-3P 225241-71-4P 225241-72-5P **225241-75-8P**
225241-97-4P **225242-22-8P** 225242-50-2P 225242-59-1P
225242-67-1P 225242-75-1P 225242-79-5P **225242-82-0P**
225242-89-7P 225242-90-0P 225242-92-2P 225242-93-3P
225242-95-5P 225242-96-6P 225242-97-7P
225242-98-8P 225243-05-0P 225243-06-1P 225243-07-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(combinatorial library of moenomycin analogs as antibacterial agents)

IT 66-84-2, D-Glucosamine hydrochloride 83-87-4 85-44-9, Phthalic anhydride 107-82-4 143-15-7, Dodecyl bromide **554-91-6**, Gentiobiose 1772-03-8, D-Galactosamine hydrochloride 2438-80-4, L-Fucose 2595-05-3 3458-28-4, D-Mannose 3615-37-0 3616-19-1 4163-60-4 6938-66-5 32449-92-6 61490-28-6 67314-36-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(combinatorial library of moenomycin analogs as antibacterial agents)

IT 572-09-8P, Acetobromoglucose 2936-70-1P 6635-17-2P 7139-63-1P
7597-81-1P 10022-13-6P 10034-20-5P 13964-23-3P 16758-34-2P
23661-28-1P 24332-95-4P 24404-52-2P 27894-87-7P 28022-14-2P
49587-35-1P 51471-40-0P 51921-33-6P 54621-94-2P 55951-90-1P
57701-27-6P 75829-69-5P 76375-66-1P 79528-49-7P 79528-50-0P
104875-44-7P 127061-10-3P 127061-11-4P 131234-07-6P 131614-84-1P
136680-04-1P 139631-37-1P 143774-07-6P 185114-94-7P
188790-06-9P 196397-79-2P 196397-80-5P
196397-81-6P 205441-61-8P 205676-33-1P 205676-34-2P
205676-35-3P 205676-36-4P 205676-39-7P 205676-46-6P 211486-53-2P
211486-56-5P 211486-57-6P 211486-60-1P 211486-61-2P 211486-65-6P
220017-47-0P 220774-86-7P 220774-88-9P 220774-90-3P 220774-92-5P
220774-94-7P 220774-98-1P 220775-00-8P 220775-04-2P 225240-99-3P
225241-00-9P 225241-01-0P 225241-03-2P 225241-04-3P 225241-05-4P
225241-06-5P 225241-07-6P 225241-09-8P 225241-12-3P 225241-14-5P
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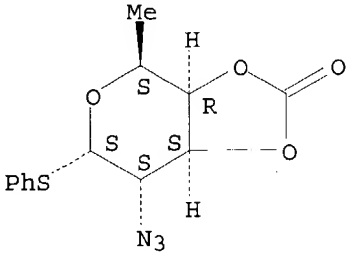
225241-38-3P 225241-39-4P 225241-40-7P 225241-41-8P 225241-42-9P
225241-43-0P 225241-48-5P 225241-56-5P 225241-60-1P 225241-61-2P
225241-62-3P 225241-63-4P 225241-64-5P 225241-65-6P 225241-66-7P
225241-67-8P 225241-68-9P 225241-73-6P **225241-74-7P**
225241-76-9P 225241-80-5P 225241-84-9P 225241-90-7P 225242-13-7P
225242-18-2P 225242-42-2P 225242-46-6P **225242-63-7P**
225242-65-9P 225242-73-9P 225242-99-9P 225243-00-5P
225243-01-6P 225243-02-7P 225243-03-8P 225243-04-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(combinatorial library of moenomycin analogs as antibacterial agents)

IT **196397-82-7P 196397-83-8P 196397-84-9P**
225241-75-8P 225242-22-8P 225242-67-1P
225242-82-0P 225242-89-7P 225242-95-5P
225242-96-6P 225242-97-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(combinatorial library of moenomycin analogs as antibacterial agents)

RN 196397-82-7 HCAPLUS
CN α-L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, cyclic

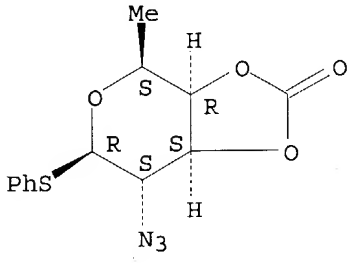
3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



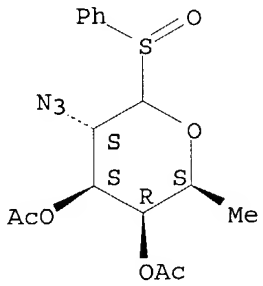
RN 196397-83-8 HCAPLUS
CN β-L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



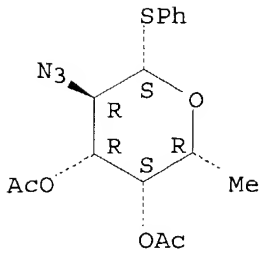
RN 196397-84-9 HCAPLUS
CN L-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



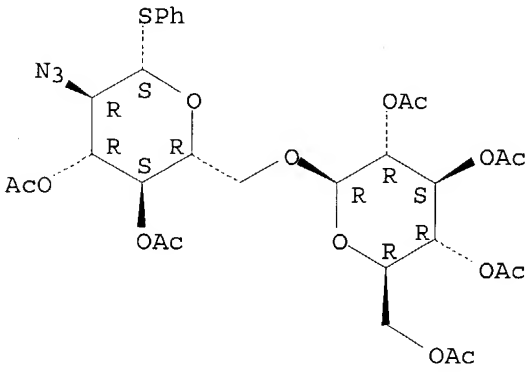
RN 225241-75-8 HCAPLUS
CN β-D-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



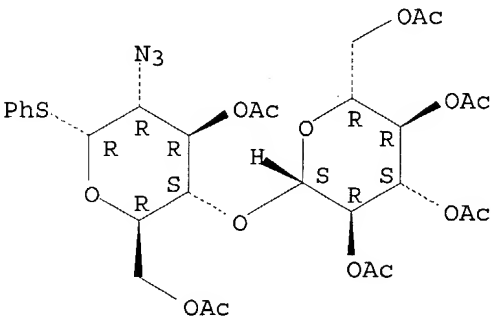
RN 225242-22-8 HCAPLUS
CN β-D-Glucopyranoside, phenyl 2-azido-2-deoxy-6-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-1-thio-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



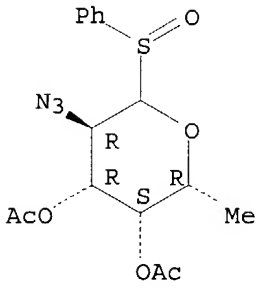
RN 225242-67-1 HCAPLUS
CN α-D-Glucopyranoside, phenyl 2-azido-2-deoxy-4-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-1-thio-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



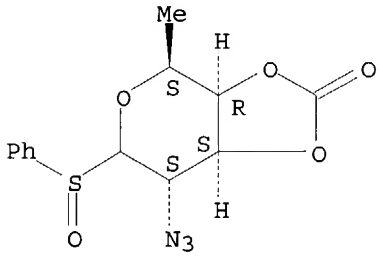
RN 225242-82-0 HCAPLUS
CN D-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



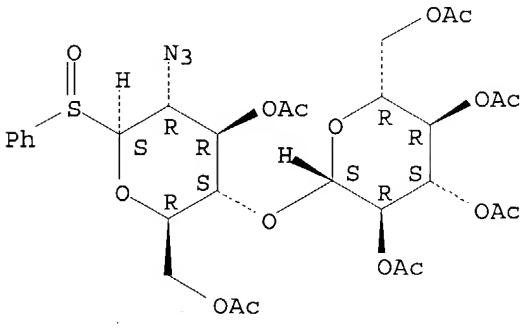
RN 225242-89-7 HCAPLUS
CN L-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



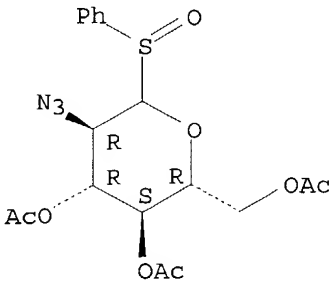
RN 225242-95-5 HCAPLUS
CN β-D-Glucopyranose, 2-azido-1,2-dideoxy-1-(phenylsulfinyl)-4-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-, 3,6-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



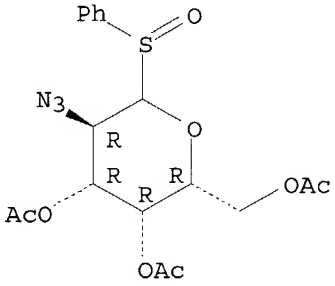
RN 225242-96-6 HCAPLUS
CN D-Glucopyranose, 2-azido-1,2-dideoxy-1-(phenylsulfinyl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



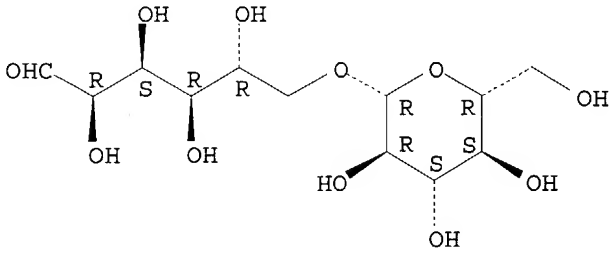
RN 225242-97-7 HCAPLUS
CN D-Galactopyranose, 2-azido-1,2-dideoxy-1-(phenylsulfinyl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



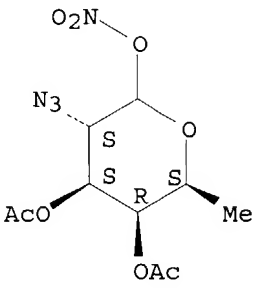
IT **554-91-6**, Gentiobiose
RL: RCT (Reactant); RACT (Reactant or reagent)
(combinatorial library of moenomycin analogs as antibacterial agents)
RN 554-91-6 HCAPLUS
CN D-Glucose, 6-O-β-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



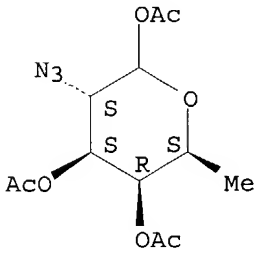
IT **188790-06-9P 196397-79-2P 196397-80-5P**
196397-81-6P 205441-61-8P 225241-74-7P
225242-18-2P 225242-63-7P 225242-65-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(combinatorial library of moenomycin analogs as antibacterial agents)
RN 188790-06-9 HCAPLUS
CN L-Galactopyranose, 2-azido-2,6-dideoxy-, 3,4-diacetate 1-nitrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



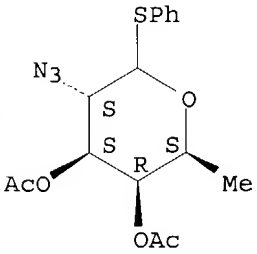
RN 196397-79-2 HCAPLUS
CN L-Galactopyranose, 2-azido-2,6-dideoxy-, 1,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



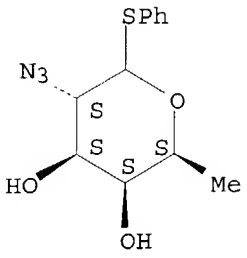
RN 196397-80-5 HCAPLUS
CN L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



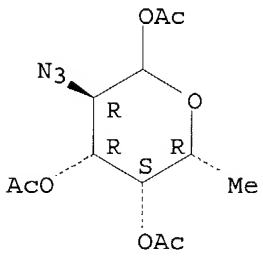
RN 196397-81-6 HCAPLUS
CN L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



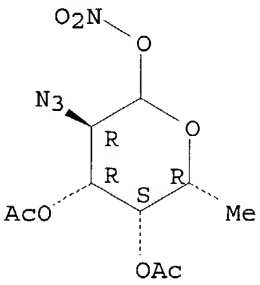
RN 205441-61-8 HCAPLUS
CN D-Galactopyranose, 2-azido-2,6-dideoxy-, 1,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



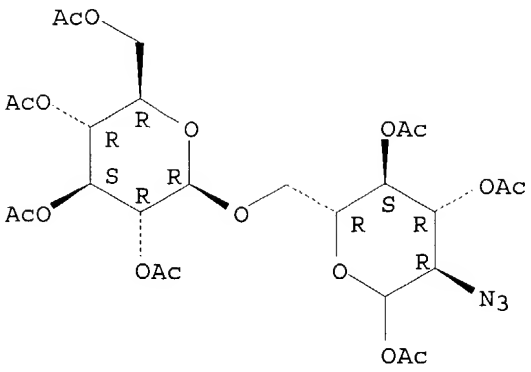
RN 225241-74-7 HCAPLUS
CN D-Galactopyranose, 2-azido-2,6-dideoxy-, 3,4-diacetate 1-nitrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



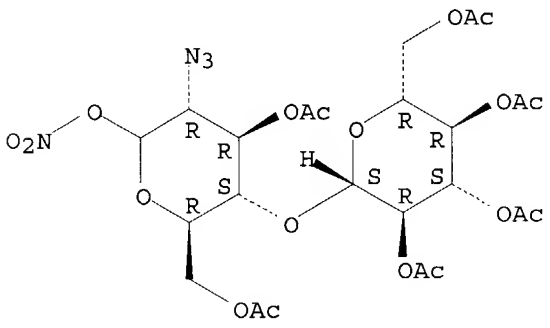
RN 225242-18-2 HCAPLUS
CN D-Glucopyranose, 2-azido-2-deoxy-6-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-, 1,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



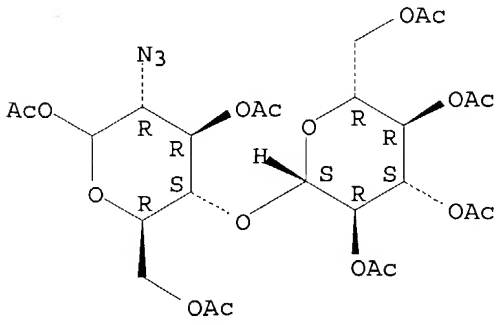
RN 225242-63-7 HCAPLUS
CN D-Glucopyranose, 2-azido-2-deoxy-4-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-, 3,6-diacetate 1-nitrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225242-65-9 HCAPLUS
CN D-Glucopyranose, 2-azido-2-deoxy-4-O-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)-, 1,3,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



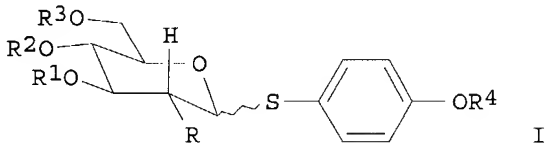
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:15590 HCAPLUS
DOCUMENT NUMBER: 128:102341

TITLE: Solution and solid-phase preparation of glycosidic linkage oligosaccharides
INVENTOR(S): Kahne, Daniel E.; Goodnow, Robert A., Jr.; Taylor, Carol M.; Yan, Lin
PATENT ASSIGNEE(S): Trustees of Princeton University, USA
SOURCE: U.S., 58 pp., Cont.-in-part of U.S. Ser. No. 198,271. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5700916	A	19971223	US 1994-281167	19940727
US 5639866	A	19970617	US 1993-21391	19930223
US 5635612	A	19970603	US 1994-198271	19940218
PRIORITY APPLN. INFO.:			US 1993-21391 A2	19930223
			US 1994-198271 A2	19940218

OTHER SOURCE(S): MARPAT 128:102341
GI



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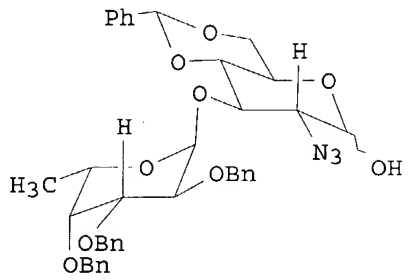


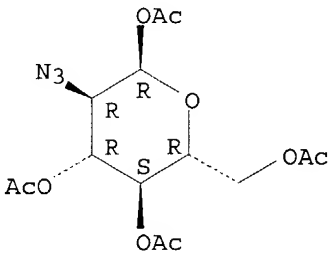
II

AB The invention relates to methods that permit the rapid construction of azidodeoxy oligosaccharides via glycosidation of arylthio glycosides I (R = group convertible to amino acid; R1-R4 = independently H, alkyl, hydroxy protecting group) and other glycoconjugates. Methods for forming multiple glycosidic linkages in solution in a single step are disclosed. The invention takes advantage of the discovery that the relative reactivity of glycoside residues containing **anomeric** sulfoxides and nucleophilic functional groups can be controlled. In another aspect of the invention, the reactivity of activated **anomeric** sugar sulfoxides is utilized in a solid phase method for the formation of glycosidic linkages. The methods disclosed may be applied to the preparation of specific oligosaccharides and other glycoconjugates, as well as to the preparation of glycosidic libraries comprising mixts. of various oligosaccharides, including glycoconjugates, which can be screened for biol. activity.

Thus, solid-phase preparation of azidodeoxy oligosaccharide II is reported.

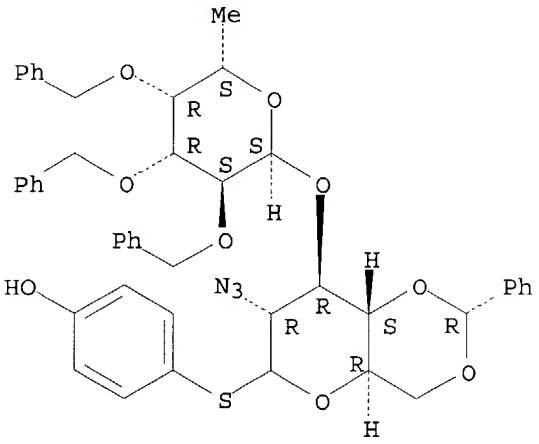
IC ICM C07G003-00
ICS C07H015-00
NCL 536001110
CC 33-4 (Carbohydrates)
IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(azidodeoxy; solution and solid phase preparation of glycosidic linkage oligosaccharides)
IT **Solid phase synthesis**
(solution and solid phase preparation of glycosidic linkage oligosaccharides)
IT 4026-32-8P 16741-27-8P 33985-27-2P 39981-26-5P **56883-33-1P** 73322-40-4P 135197-83-0P 146331-74-0P 146331-75-1P 146331-76-2P 146345-92-8P 157135-56-3DP, polymer support 157135-57-4DP, polymer support 157135-59-6DP, polymer support 157135-60-9DP, polymer support 157135-61-0DP, polymer support **157135-67-6DP**, polymer support **157135-69-8DP**, polymer support 157239-66-2P 167011-99-6P 167012-03-5P 167012-06-8P 167012-09-1P 167012-11-5P 167012-28-4P 167012-29-5P 167012-30-8P 167012-31-9P 167012-74-0DP, polymer support 167012-78-4DP, polymer support 167012-90-0DP, polymer support 167012-93-3P 191276-89-8P 191276-90-1P 191276-93-4P **196398-18-2P 196398-20-6P** 200814-38-6P 200814-40-0P 200814-41-1P 200814-42-2P 200814-43-3P 200814-44-4P 200814-46-6P 200814-47-7P **200814-48-8P 200814-49-9DP**, polymer support 201405-20-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solution and solid phase preparation of glycosidic linkage oligosaccharides)
IT **56883-33-1P 157135-67-6DP**, polymer support **157135-69-8DP**, polymer support **196398-18-2P 196398-20-6P 200814-48-8P 200814-49-9DP**, polymer support
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solution and solid phase preparation of glycosidic linkage oligosaccharides)
RN 56883-33-1 HCAPLUS
CN α-D-Glucopyranose, 2-azido-2-deoxy-, 1,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 157135-67-6 HCAPLUS
CN D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-3-O-[6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl]-4,6-O-(phenylmethylene)-1-thio-, (R)- (9CI) (CA INDEX NAME)

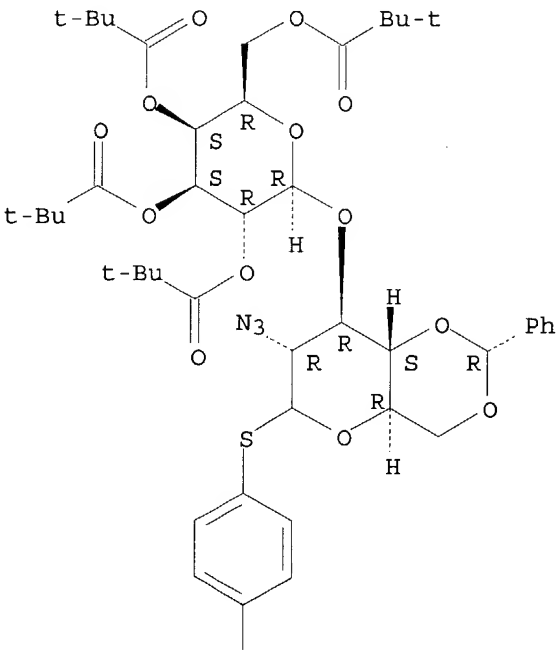
Absolute stereochemistry.



RN 157135-69-8 HCAPLUS
CN D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-3-O-[2,3,4,6-tetrakis-O-(2,2-dimethyl-1-oxopropyl)-β-D-galactopyranosyl]-1-thio-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

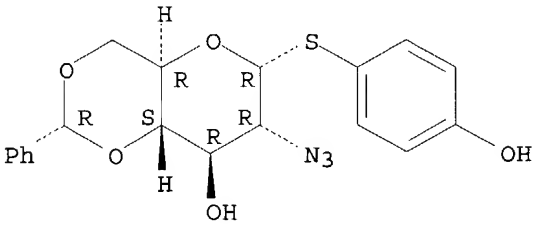
PAGE 1-A



OH

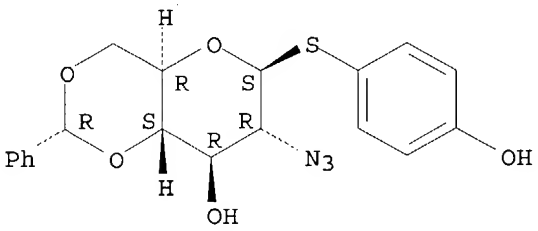
RN 196398-18-2 HCAPLUS
CN α-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



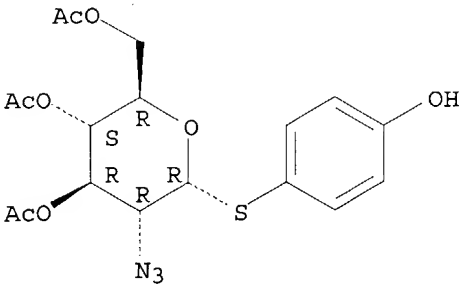
RN 196398-20-6 HCAPLUS
CN β-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



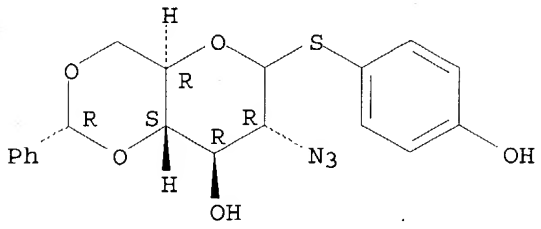
RN 200814-48-8 HCAPLUS
CN α-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-1-thio-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200814-49-9 HCAPLUS
CN D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

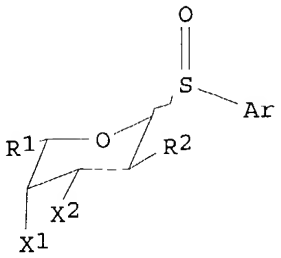
Absolute stereochemistry.



L20 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:640677 HCAPLUS
DOCUMENT NUMBER: 127:262994
TITLE: Stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides
INVENTOR(S): Kahne, Daniel E.; Yan, Lin
PATENT ASSIGNEE(S): Princeton University, USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9734906	A1	19970925	WO 1997-US4638		19970321
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
CA 2249342	AA	19970925	CA 1997-2249342		19970321
AU 9723412	A1	19971010	AU 1997-23412		19970321
EP 910568	A1	19990428	EP 1997-916163		19970321
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
US 6040433	A	20000321	US 1997-822131		19970321
JP 2000507247	T2	20000613	JP 1997-533751		19970321
PRIORITY APPLN. INFO.:			US 1996-13800P	P	19960321
			WO 1997-US4638	W	19970321

OTHER SOURCE(S): MARPAT 127:262994
GI



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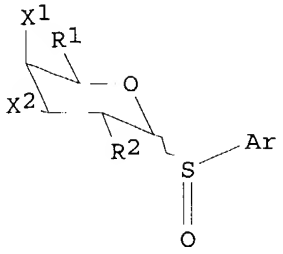


II

AB Stereoselective solid-phase glycosidation of sulfinyl hexoses I and II (R1,R2 = same or different substituent containing H, C, O, S, P; Ar = aromatic; X1,X2 = same or different to form with the hexose carbon s a cyclic structure) is reported in preparation of disaccharides. Thus, I (R1 = Me; R2 = CH2C6H4OMe-4; X1X2 = CO; Ar = Ph) was prepared and used in solid-phase preparation of disaccharides.

IC ICM C07G003-00
ICS C07H001-00; C07H005-08; C07H005-10

CC 33-4 (Carbohydrates)

IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(disaccharides; stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

IT **Solid phase synthesis**
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

IT **69-79-4** 2438-80-4, L-Fucose 4026-35-1 14641-93-1
24404-53-3 39281-65-7, β-L-Glucopyranose 81058-26-6 120095-47-8
153610-21-0 **185612-71-9 196397-80-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

IT 492-61-5P, β-D-Glucopyranose 4098-06-0P 4163-60-4P 6291-42-5P
7322-31-8P, β-D-Mannopyranose 16758-34-2P 18968-05-3P
28022-13-1P 34213-32-6P 50615-78-6P **80321-89-7P**
84278-00-2P 92051-23-5P 100272-47-7P 117606-50-5P
117606-53-8P 127061-11-4P 145307-57-9P 145307-59-1P 153610-22-1P
167612-34-2P 183472-42-6P 183875-03-8P 183875-04-9P
185612-72-0P 185612-73-1P 185612-75-3P 185612-82-2P
185612-83-3P 185612-84-4P 196397-53-2P 196397-55-4P 196397-56-5P
196397-57-6P 196397-58-7P 196397-59-8P 196397-61-2P 196397-63-4P
196397-65-6P 196397-67-8P 196397-68-9P 196397-69-0P 196397-70-3P
196397-71-4P 196397-73-6P 196397-74-7P 196397-75-8P 196397-77-0P
196397-78-1P **196397-81-6P 196397-82-7P**
196397-83-8P 196397-84-9P 196397-87-2P 196397-88-3P
196397-89-4P 196397-90-7P 196397-92-9P 196397-93-0P 196397-94-1P
196398-03-5P 196398-05-7P **196398-14-8P 196398-16-0P**
196398-18-2P 196398-20-6P 196398-21-7P
196398-22-8P 196398-23-9P 196398-24-0P
196398-25-1P 196398-26-2P 196398-27-3P
196398-28-4P 196398-29-5P 196398-30-8P
196398-31-9P 196398-32-0P 196398-34-2P
196398-36-4P 196398-37-5P 196398-38-6P 196398-39-7P
196398-40-0P 196398-41-1P 196398-42-2P 196398-43-3P 196398-44-4P
196398-45-5P **196398-46-6P** 196398-47-7P 196398-48-8P
196398-49-9P 196398-50-2P 196398-51-3P 196398-52-4P 196398-53-5P

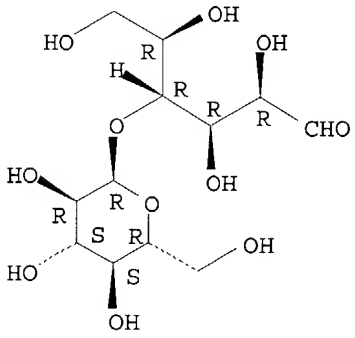
196398-54-6P 196398-55-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

IT **185612-81-1P** 196397-72-5P 196397-76-9P **196397-79-2P**
196397-85-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

IT **69-79-4 185612-71-9 196397-80-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

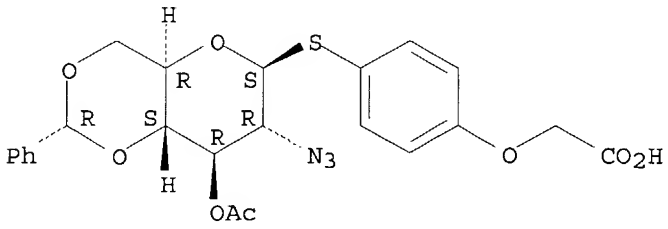
RN 69-79-4 HCAPLUS
CN D-Glucose, 4-O-α-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



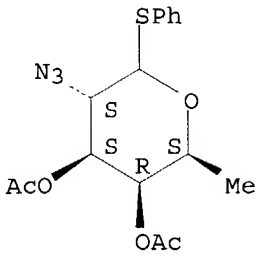
RN 185612-71-9 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-β-D-glucopyranosyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 196397-80-5 HCAPLUS
CN L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, 3,4-diacetate (9CI) (CA INDEX NAME)

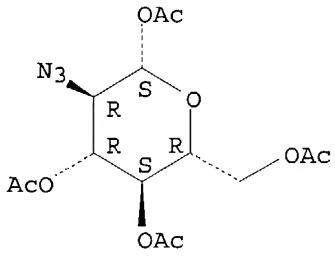
Absolute stereochemistry.



IT **80321-89-7P 84278-00-2P 185612-72-0P**
185612-73-1P 196397-81-6P 196397-82-7P
196397-83-8P 196397-84-9P 196398-14-8P
196398-16-0P 196398-18-2P 196398-20-6P
196398-21-7P 196398-22-8P 196398-23-9P
196398-24-0P 196398-25-1P 196398-26-2P
196398-27-3P 196398-28-4P 196398-29-5P
196398-30-8P 196398-31-9P 196398-32-0P
196398-34-2P 196398-36-4P 196398-37-5P
196398-46-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)

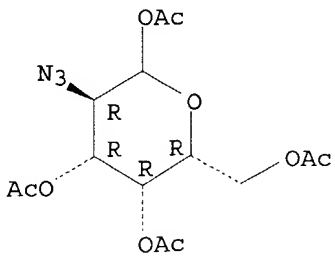
RN 80321-89-7 HCAPLUS
CN β-D-Glucopyranose, 2-azido-2-deoxy-, 1,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



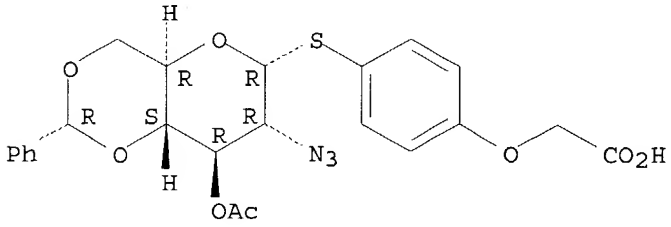
RN 84278-00-2 HCAPLUS
CN D-Galactopyranose, 2-azido-2-deoxy-, 1,3,4,6-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



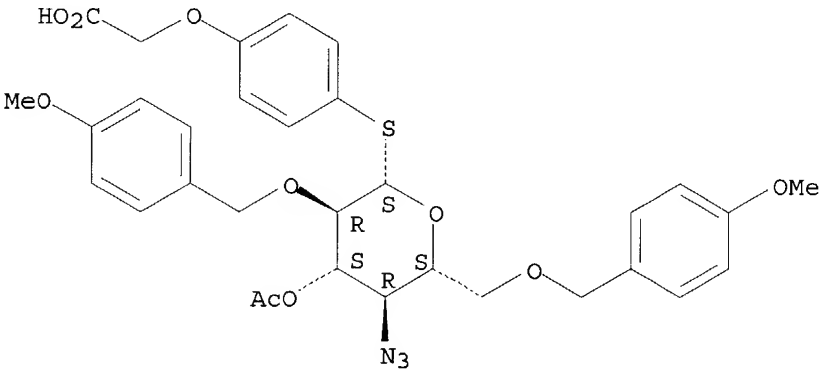
RN 185612-72-0 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



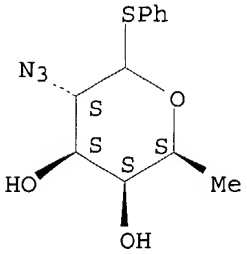
RN 185612-73-1 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-4-azido-4-deoxy-2,6-bis-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



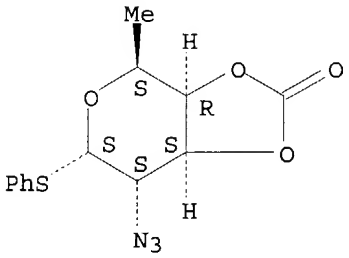
RN 196397-81-6 HCAPLUS
CN L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



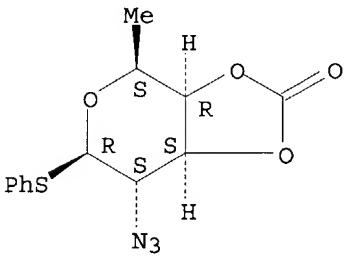
RN 196397-82-7 HCAPLUS
CN α-L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



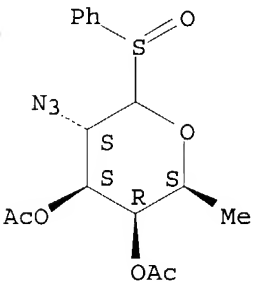
RN 196397-83-8 HCAPLUS
CN β-L-Galactopyranoside, phenyl 2-azido-2,6-dideoxy-1-thio-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



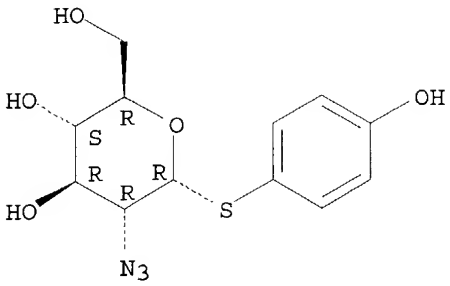
RN 196397-84-9 HCAPLUS
CN L-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, 3,4-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



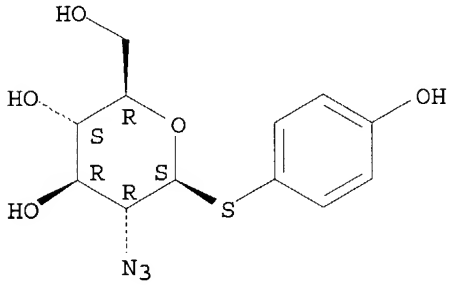
RN 196398-14-8 HCAPLUS
CN α-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



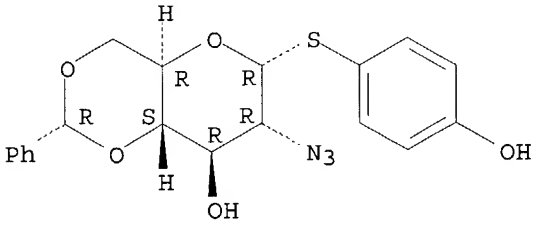
RN 196398-16-0 HCAPLUS
CN β-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



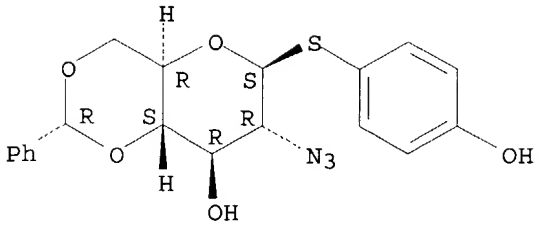
RN 196398-18-2 HCAPLUS
CN α-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



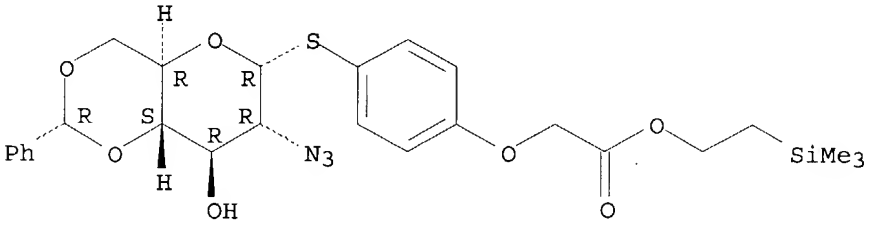
RN 196398-20-6 HCAPLUS
CN β-D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



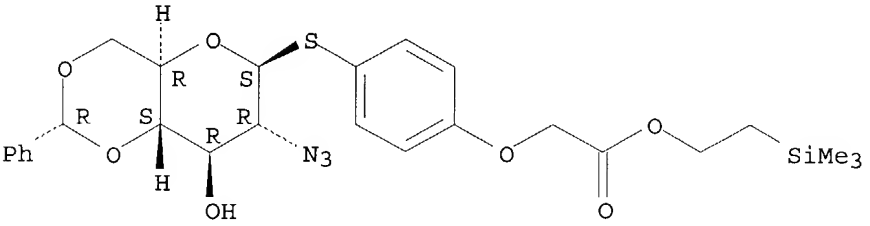
RN 196398-21-7 HCAPLUS
CN Acetic acid, [4-[[2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



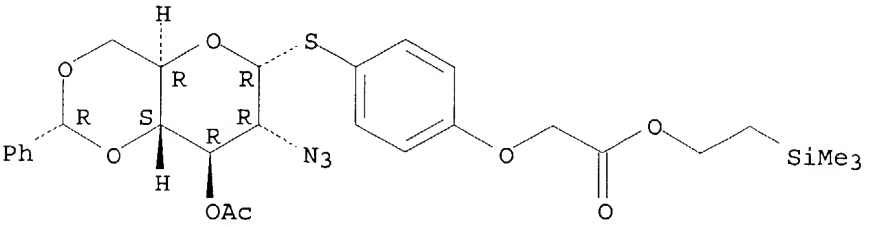
RN 196398-22-8 HCAPLUS
CN Acetic acid, [4-[[2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-β-D-glucopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



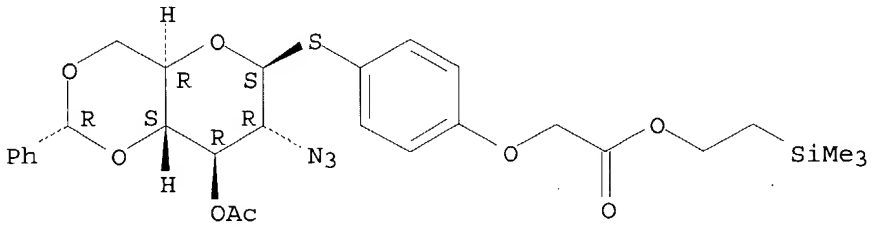
RN 196398-23-9 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-α-D-glucopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



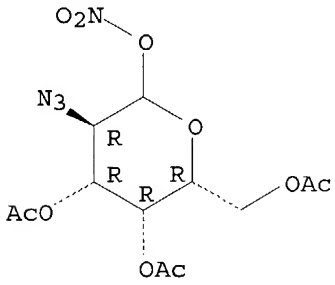
RN 196398-24-0 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-[(R)-phenylmethylene]-β-D-glucopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



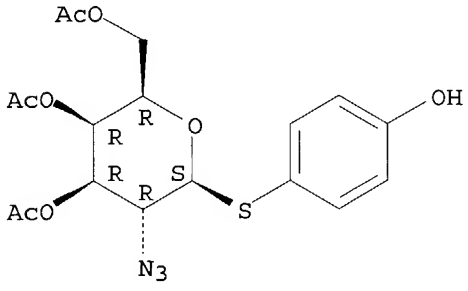
RN 196398-25-1 HCAPLUS
CN D-Galactopyranose, 2-azido-2-deoxy-, 3,4,6-triacetate 1-nitrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



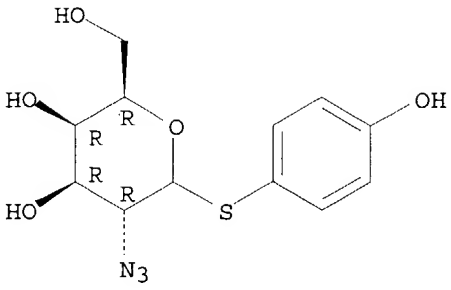
RN 196398-26-2 HCAPLUS
CN β-D-Galactopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-1-thio-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



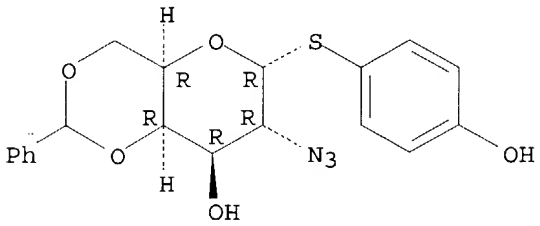
RN 196398-27-3 HCAPLUS
CN D-Galactopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



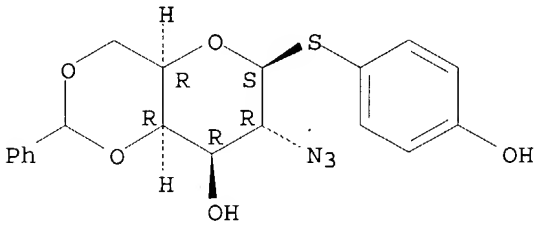
RN 196398-28-4 HCAPLUS
CN α-D-Galactopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



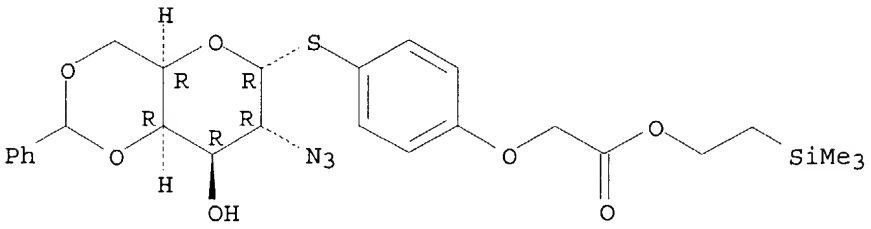
RN 196398-29-5 HCAPLUS
CN β-D-Galactopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



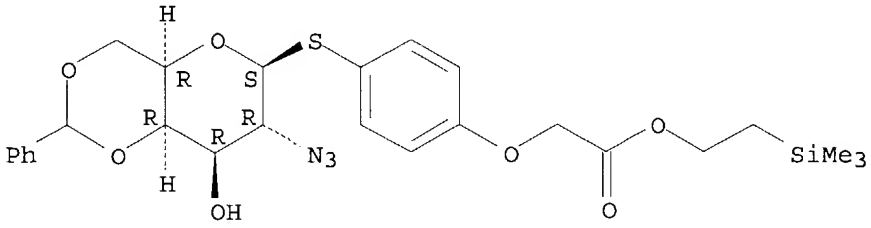
RN 196398-30-8 HCAPLUS
CN Acetic acid, [4-[[2-azido-2-deoxy-4,6-O-(phenylmethylene)-α-D-galactopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



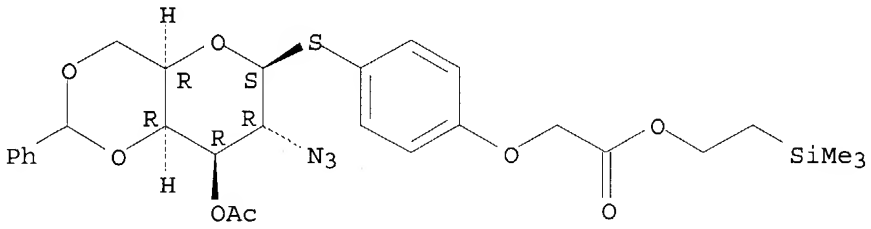
RN 196398-31-9 HCAPLUS
CN Acetic acid, [4-[[2-azido-2-deoxy-4,6-O-(phenylmethylene)-β-D-galactopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



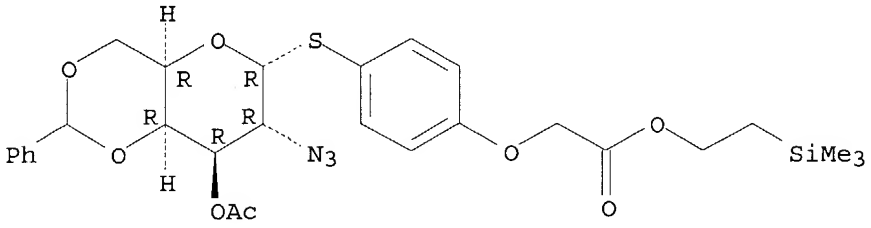
RN 196398-32-0 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-(phenylmethylene)-β-D-galactopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



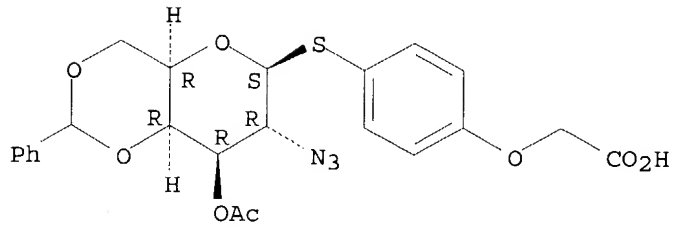
RN 196398-34-2 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-(phenylmethylene)-α-D-galactopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



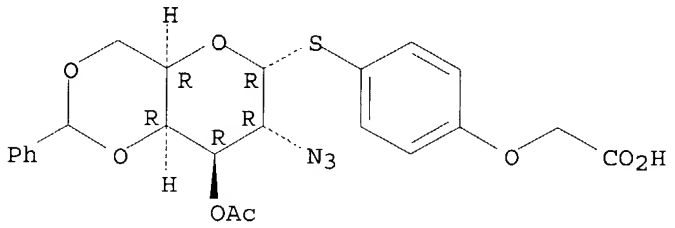
RN 196398-36-4 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-(phenylmethylene)-β-D-galactopyranosyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



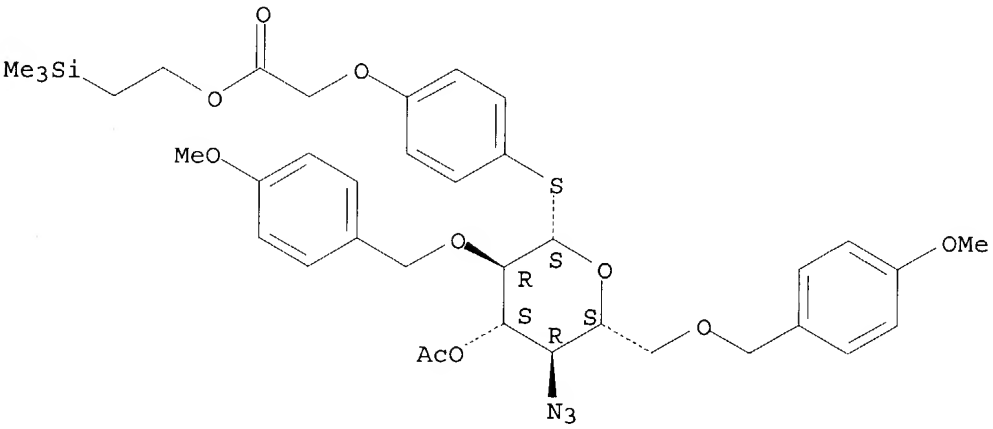
RN 196398-37-5 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-2-azido-2-deoxy-4,6-O-(phenylmethylene)-α-D-galactopyranosyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



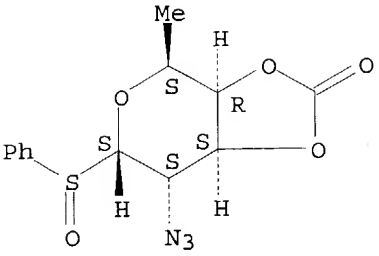
RN 196398-46-6 HCAPLUS
CN Acetic acid, [4-[[3-O-acetyl-4-azido-4-deoxy-2,6-bis-O-[(4-methoxyphenyl)methyl]-β-D-glucopyranosyl]thio]phenoxy]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



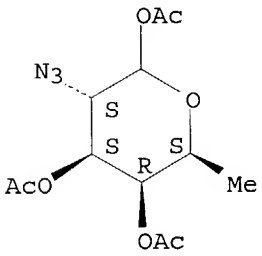
IT **185612-81-1P 196397-79-2P 196397-85-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective solid-phase glycosidation of sulfinyl hexoses in preparation of disaccharides)
RN 185612-81-1 HCAPLUS
CN α-L-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



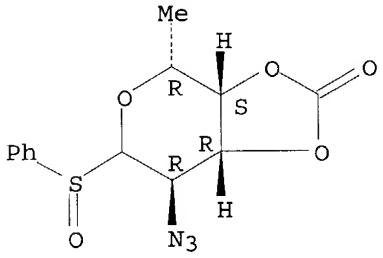
RN 196397-79-2 HCAPLUS
CN L-Galactopyranose, 2-azido-2,6-dideoxy-, 1,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 196397-85-0 HCAPLUS
CN D-Galactopyranose, 2-azido-1,2,6-trideoxy-1-(phenylsulfinyl)-, cyclic 3,4-carbonate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L20 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1997:394844 HCAPLUS
DOCUMENT NUMBER:	127:50943
TITLE:	Solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides
INVENTOR(S):	Kahne, Daniel E.
PATENT ASSIGNEE(S):	Trustees of Princeton University, USA
SOURCE:	U.S., 52 pp., Cont.-in-part of U.S. Ser. No. 21,391. CODEN: USXXAM
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	3

PATENT INFORMATION:

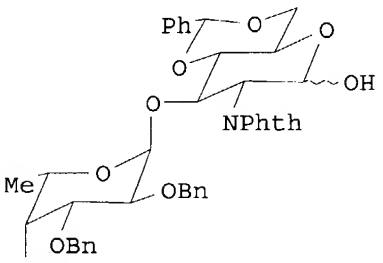
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5635612	A	19970603	US 1994-198271	19940218
US 5639866	A	19970617	US 1993-21391	19930223
CA 2156717	AA	19940901	CA 1994-2156717	19940223
CA 2156717	C	20010529		
WO 9419360	A1	19940901	WO 1994-US1604	19940223
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9461382	A1	19940914	AU 1994-61382	19940223
AU 675829	B2	19970220		
ZA 9401229	A	19940919	ZA 1994-1229	19940223
EP 686160	A1	19951213	EP 1994-908048	19940223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08511234	T2	19961126	JP 1994-519067	19940223
RU 2134693	C1	19990820	RU 1995-122803	19940223
MX 9401390	A	20000331	MX 1994-1390	19940223
US 5700916	A	19971223	US 1994-281167	19940727
US 5861492	A	19990119	US 1997-780914	19970109
US 5792839	A	19980811	US 1997-783299	19970110
US 6194393	B1	20010227	US 1998-13922	19980127

PRIORITY APPLN. INFO.:

US 1993-21391	A2	19930223
US 1994-198271	A	19940218
WO 1994-US1604	W	19940223
US 1997-780914	A3	19970109

OTHER SOURCE(S): CASREACT 127:50943

GI



I

AB The glycosidation of activated **anomeric** sugar sulfoxides is utilized in a solid phase for the formation of glycosidic linkages in preparation of oligosaccharides. Thus, oligosaccharide I was prepared via solid phase glycosidation of sugar sulfoxide. The methods disclosed may be applied to the preparation of specific oligosaccharides and other glycoconjugates, as well as to the preparation of glycosidic libraries comprising mixts. of various oligosaccharides, including glycoconjugates.

IC ICM A61K038-16
ICS C07K001-00; C07H001-00; C07H015-24

NCL 536018500

CC 33-7 (Carbohydrates)

ST glycoconjugate solid phase prepn oligosaccharide; combinatorial library

oligosaccharide solid phase prepn; **anomeric** monosaccharide sulfoxide glycosidation; acetamidodeoxy oligosaccharide solid phase prepn

IT **Oligosaccharides, preparation**
RL: SPN (Synthetic preparation); PREP (Preparation)
(acetamidodeoxy; solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT Monosaccharides
RL: RCT (Reactant); RACT (Reactant or reagent)
(**anomeric** sulfoxides; solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT Glycosylation
(solid phase; solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT Combinatorial library
Solid phase synthesis
(solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT Glycoconjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT 16741-27-8P 21288-61-9P, ε-Pyrromycinone 33985-27-2P
135197-83-0P 146331-74-0P 157135-56-3DP, polymer support
157135-57-4DP, polymer support 157135-59-6DP, polymer support
157135-60-9DP, polymer support 157135-61-0DP, polymer support
167012-06-8P 167012-08-0P 167012-09-1P 167012-10-4P 167012-28-4P
167012-29-5P 167012-30-8P 167012-31-9P 167012-32-0P 167012-33-1P
167012-71-7DP, polymer support 167012-73-9DP, polymer support
167012-75-1DP, polymer support 167012-78-4DP, polymer support
167012-88-6P 167012-90-0DP, polymer support 167012-93-3P
191276-93-4P 191276-96-7P 191276-97-8P 191276-98-9P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT 3615-37-0P, D-Fucose 38768-81-9P 39706-70-2P 58781-26-3P
146331-75-1P 146331-76-2P 146345-92-8P 157135-64-3P 157487-13-3P
167012-11-5P 167012-23-9P 167012-24-0P 167012-25-1P 167012-26-2P
167012-27-3P 167012-37-5P 167012-41-1P 167012-45-5P 167012-79-5DP, polymer-bound 167012-79-5P 167012-81-9P 167012-92-2P 167254-22-0P
191276-88-7P 191276-91-2P 191277-00-6P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

IT 527-52-6, Digitoxose 588-59-0, Stilbene 589-41-3 13100-46-4
39981-26-5 64913-16-2 122795-89-5 146331-73-9 157135-56-3
157135-58-5 157135-66-5 157239-66-2 167011-99-6 167012-00-2
167012-01-3 167012-02-4 167012-03-5 167012-21-7 167012-22-8
167012-70-6 167012-71-7 167012-76-2 167254-21-9 191276-89-8
191276-90-1 191276-99-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase preparation of oligosaccharides via glycosidation of **anomeric** sugar sulfoxides)

L20 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:232338 HCAPLUS
DOCUMENT NUMBER: 125:11432
TITLE: A new synthetic method of peptide-chitosan conjugates:

solid-phase synthesis of GHK coupled to chitosan
AUTHOR(S): Ha, Byung-Jo; Lee, Ok-Sub; Lee, Yoon-Sik
CORPORATE SOURCE: Pacific R & D Center, Kyunggi, 449-900, S. Korea
SOURCE: Journal of Industrial and Engineering Chemistry (Seoul) (1995), 1(1), 57-63
CODEN: JIECFI; ISSN: 1226-086X
PUBLISHER: Korean Society of Industrial and Engineering Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A novel method was developed for the solid-phase synthesis of H-Gly-L-His-L-Lys- (GHK)-chitosan conjugates, using 9-fluorenylmethoxycarbonyl (Fmoc) amino acids and BOP coupling. For this purpose, the beads (mean diameter = 70μm) were prepared by the W/O emulsion-phase separation method. The characteristics of the beads as a solid support have also been investigated. The phys. properties of this new solid support were quite different from those of the classical polystyrene-based beads. The new support had high swelling ability in water and higher amine content than com. solid supports for peptide synthesis. The model tripeptide, GHK, was successfully coupled to the chitosan beads. Peptides were fluorescence labeled to examine the release pattern of the GHK-chitosan conjugates by lysozyme.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 44

IT **Merrifield synthesis**
(solid-phase preparation of peptide-chitosan conjugates)

IT **9012-76-4**, Chitosan 29022-11-5, Fmoc-Gly-OH 71989-26-9 88574-06-5 109425-51-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase preparation of peptide-chitosan conjugates)

IT **9012-76-4DP**, Chitosan, C-terminal amides with peptides 88574-06-5DP, C-terminal amides with chitosan 177088-13-0DP, C-terminal amides with chitosan 177088-14-1DP, C-terminal amides with chitosan
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of peptide-chitosan conjugates)

IT **9012-76-4**, Chitosan
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase preparation of peptide-chitosan conjugates)

RN 9012-76-4 HCAPLUS
CN Chitosan (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

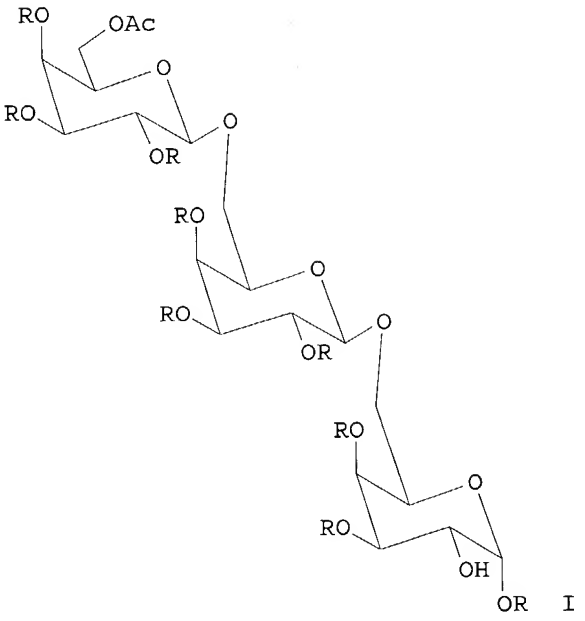
IT **9012-76-4DP**, Chitosan, C-terminal amides with peptides
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase preparation of peptide-chitosan conjugates)

RN 9012-76-4 HCAPLUS
CN Chitosan (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L20 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:534629 HCAPLUS
DOCUMENT NUMBER: 121:134629
TITLE: Glycosylation on the Merrifield Resin Using **Anomeric** Sulfoxides
AUTHOR(S): Yan, Lin; Taylor, Carol M.; Goodnow, Robert, Jr.; Kahne, Daniel
CORPORATE SOURCE: Department of Chemistry, Princeton University,

Princeton, NJ, 08544, USA
SOURCE: Journal of the American Chemical Society (1994), 116(15), 6953-4
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB It is widely recognized that methods to synthesize oligosaccharides, e.g. I (R = pivaloyl), on the solid phase would revolutionize research in carbohydrate chemical and biol. Scattered reports suggest that it should be possible to construct oligosaccharides on a resin using chemical methods. However, the efficient glycosylation of secondary alcs. on insol. resins has proven difficult largely because glycosylation reactions go more slowly in the heterogeneous environment of a resin matrix than they do in solution which permits undesirable side reactions to predominate over glycosylation. The authors show that the sulfoxide glycosylation reaction translates extremely well from solution to the solid phase. The authors demonstrate its use to make not only a (1-6)-linked trisaccharide, but to make both α and β glycosidic linkages stereospecifically and in near quant. yield to secondary alcs. related to the Lewis blood group antigens. The methodol. described herein provides the basis for a general strategy for the chemical synthesis of oligosaccharides on the solid phase.

CC 33-7 (Carbohydrates)

IT **Merrifield synthesis**

IT **Oligosaccharides**
RL: SPN (Synthetic preparation); PREP (Preparation)
(azido, preparation of, by stereoselective Merrifield glycosidation of sulfoxide sugar)

IT Glycosidation
(stereoselective, of thio glycosides on Merrifield resin using

anomeric sulfoxide sugar)

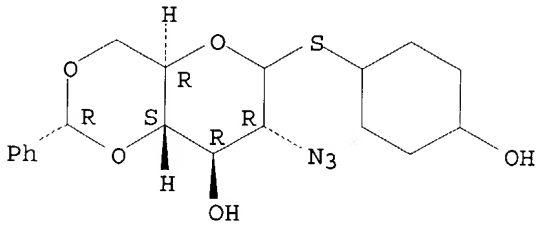
IT **157135-65-4DP**, Merrifield resin support **157135-67-6DP**, Merrifield resin support **157135-69-8DP**, Merrifield resin support
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of azidodeoxy disaccharide)

IT **157135-65-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of azidodeoxy disaccharide)

IT **157135-65-4DP**, Merrifield resin support **157135-67-6DP**, Merrifield resin support **157135-69-8DP**, Merrifield resin support
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of azidodeoxy disaccharide)

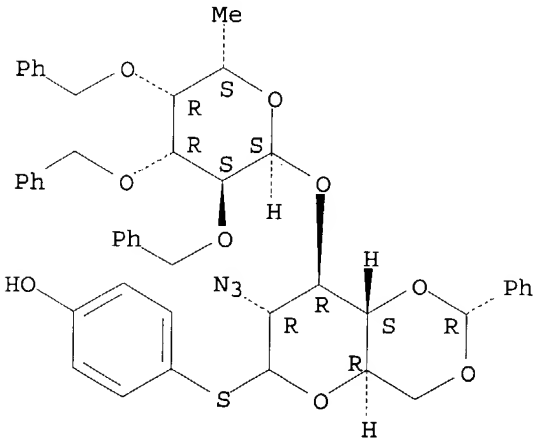
RN 157135-65-4 HCAPLUS
CN D-Glucopyranoside, 4-hydroxycyclohexyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-1-thio-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 157135-67-6 HCAPLUS
CN D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-3-O-[6-deoxy-2,3,4-tris-O-(phenylmethyl)-α-L-galactopyranosyl]-4,6-O-(phenylmethylene)-1-thio-, (R)- (9CI) (CA INDEX NAME)

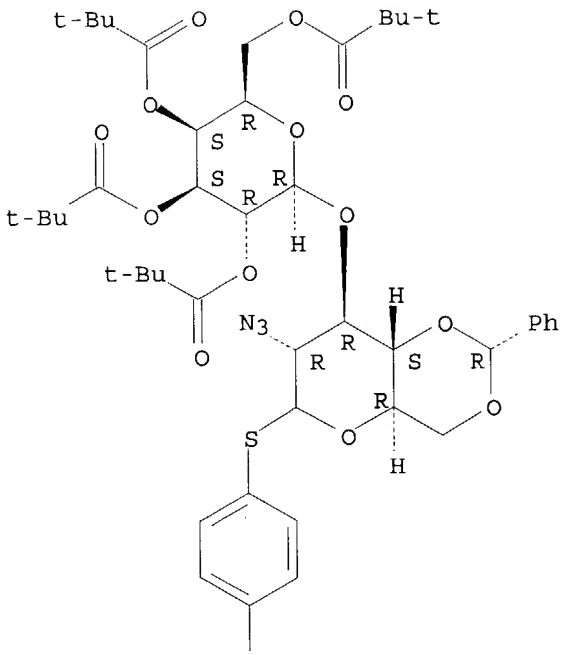
Absolute stereochemistry.



RN 157135-69-8 HCAPLUS
CN D-Glucopyranoside, 4-hydroxyphenyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-3-O-[2,3,4,6-tetrakis-O-(2,2-dimethyl-1-oxopropyl)-β-D-galactopyranosyl]-1-thio-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

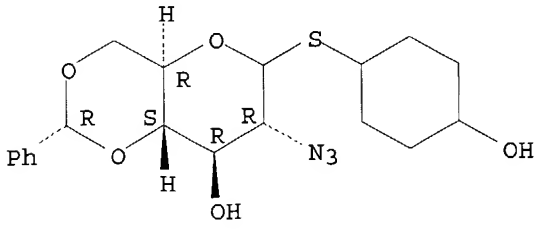
PAGE 1-A



PAGE 2-A

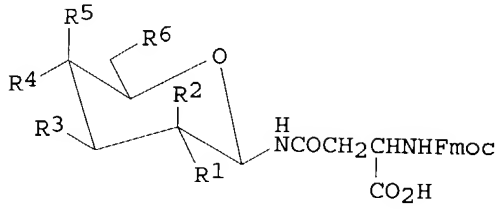
IT **157135-65-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of azidodeoxy disaccharide)
RN 157135-65-4 HCAPLUS
CN D-Glucopyranoside, 4-hydroxycyclohexyl 2-azido-2-deoxy-4,6-O-(phenylmethylene)-1-thio-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

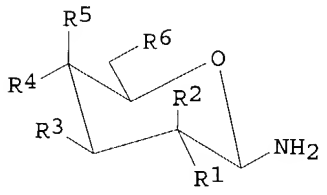


L20 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

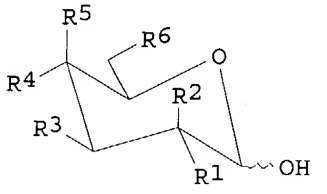
ACCESSION NUMBER: 1993:124974 HCAPLUS
DOCUMENT NUMBER: 118:124974
TITLE: Fmoc-protected, glycosylated asparagines potentially useful as reagents in the solid-phase synthesis of N-glycopeptides
AUTHOR(S): Urge, Laszlo; Otvos, Laszlo, Jr.; Lang, Emma; Wroblewski, Krzysztof; Laczko, Ilona; Hollosi, Miklos
CORPORATE SOURCE: Wistar Inst. Anat. Biol., Philadelphia, PA, 19104, USA
SOURCE: Carbohydrate Research (1992), 235, 83-93
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II



III

AB Seven title glycosylated asparagines I (Fmoc = 9-fluorenylmethoxycarbonyl; R1 = NHAc, OH, H; R2 = H, OH; R3 = β-D-galactopyranosyloxy, OH; R4 = OH, H, β-D-galactopyranosyloxy; R5 = H, OH; R6 = OH, H) were prepared by treating Fmoc-Asp-OCMe3 with pentafluorophenol by N,N'-diisopropylcarbodiimide, coupling the resulting pentafluorophenyl ester with glycosylamines II and de-tert-butylating the resulting tert-Bu esters I (R = CMe3, R1-R6 = same) with trifluoroacetivc acid. II were prepared by treating the corresponding sugars III with a saturated aqueous solution of ammonium bicarbonate. The **anomeric** configuration of the N-glycosyl bond (including that of the mannose derivative) in each of the purified compds. was shown to be β. The probable stability of the N-glycosyl and glycosidic bonds during the conditions of solid-phase peptide synthesis was investigated by treatment of the glycosylated asparagine derivs. with different concns. of trifluoroacetic acid. Based on their stability, Fmoc-Asn(sugar)-OH derivs. are excellent candidates for automated synthesis of biol. active glycopeptides.

CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 33

IT **Merrifield synthesis**
(of glycopeptides, fluorenylmethoxycarbonyl-protected glycosylated asparagines as potential reagents for)

IT 59-23-4, D-Galactose, reactions **63-42-3** 154-17-6 1811-31-0 3458-28-4, D-Mannose 3615-37-0 50787-09-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, with ammonium bicarbonate)

IT **63-42-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, with ammonium bicarbonate)
RN 63-42-3 HCAPLUS
CN D-Glucose, 4-O-β-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).